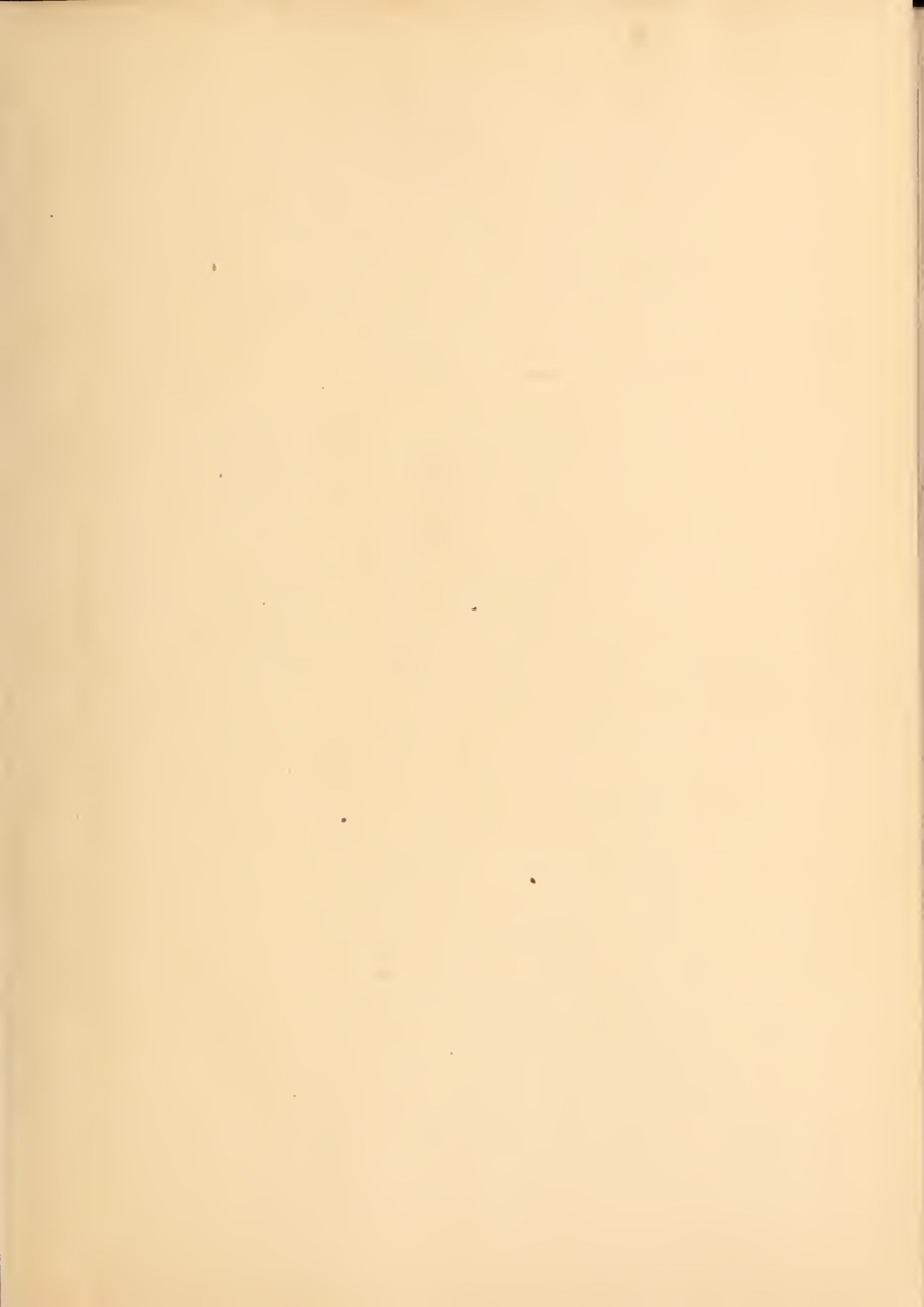


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199 Maine MEDICAL JOURNAL



THE N.Y. ACADEMY
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Vol. XXV

January, 1934

No. 1

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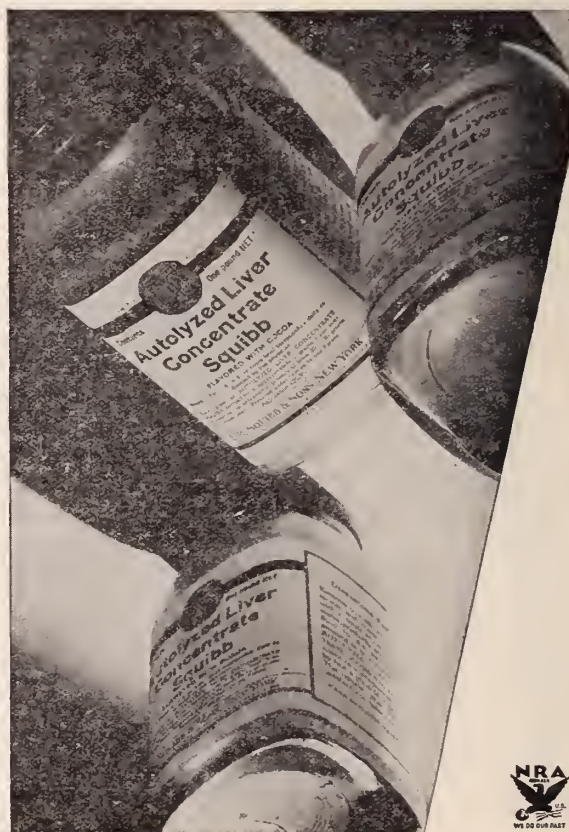
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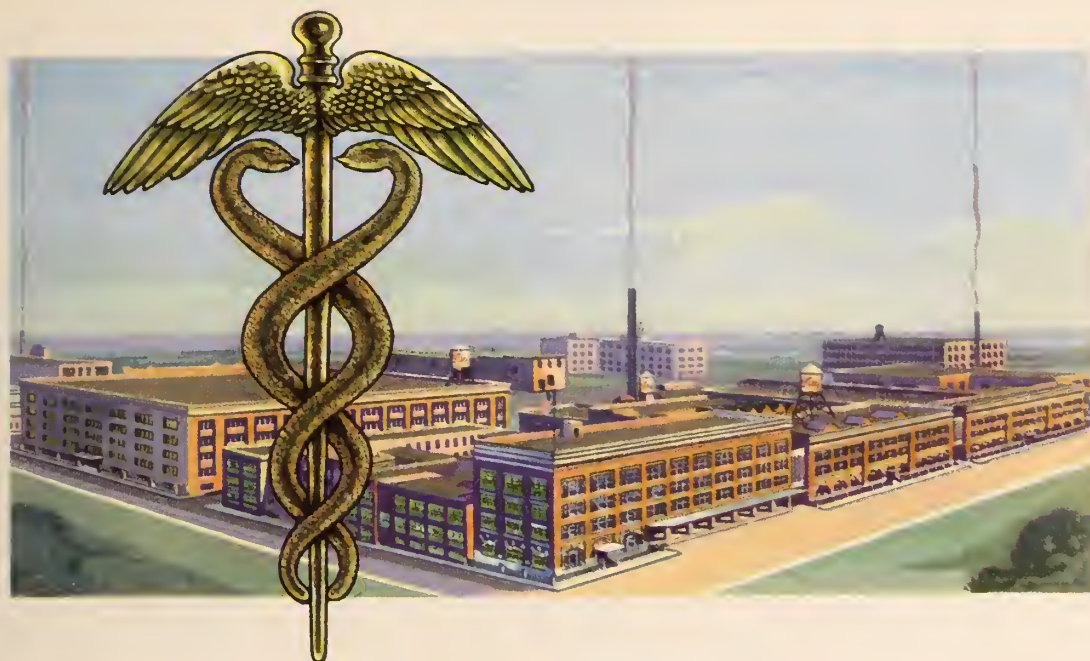


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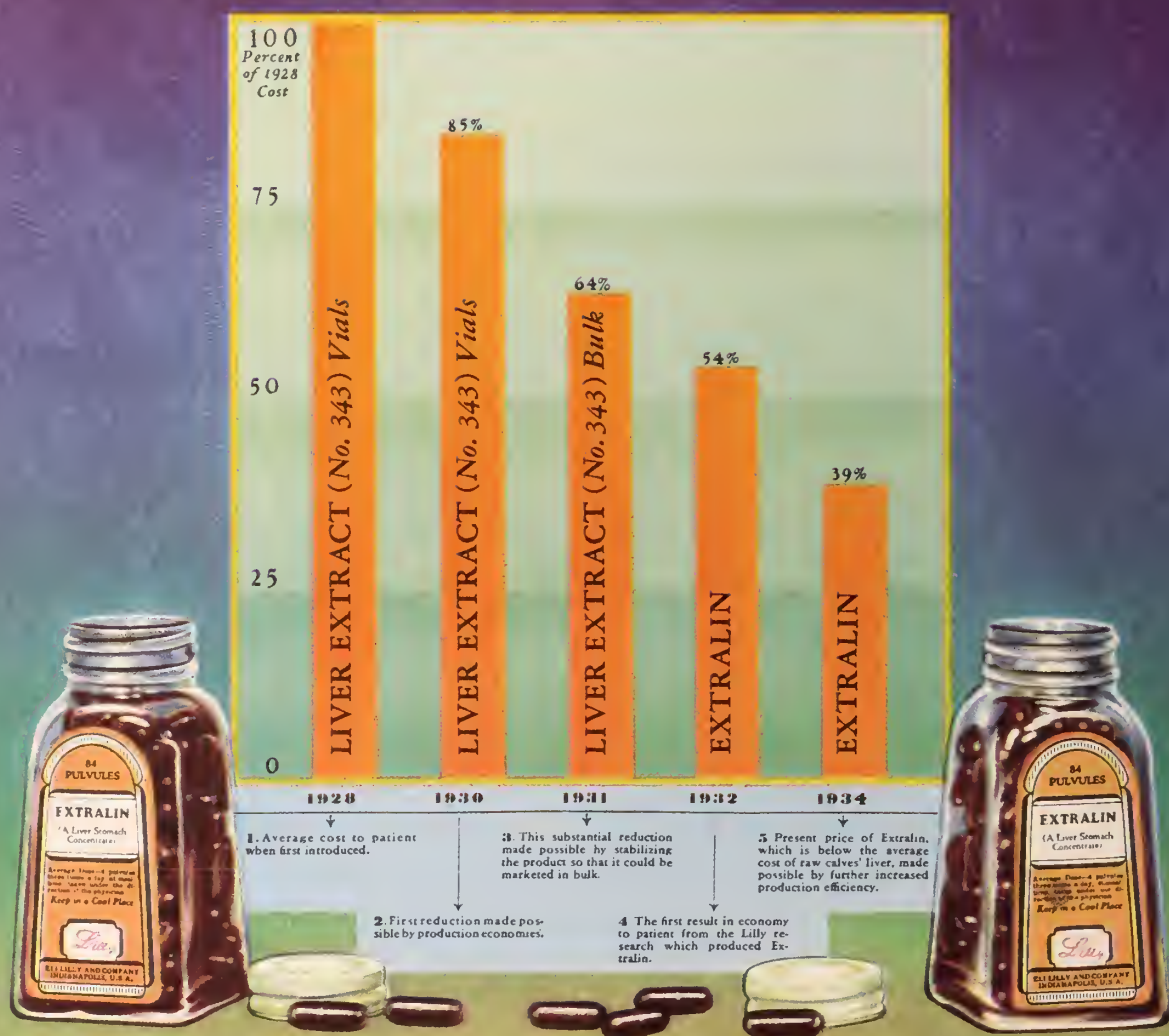
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Maine Medical Journal

The Official Organ of

The State and County Medical Societies

Vol. XXV

Portland, Maine, January, 1934

No. 1

Editorial

Last, but not least, the medical profession has been recognized by the E. R. A. At least we have been given the privilege of sending some kind of a plan for approval.

The Emergency Plan for the State of Maine, formulated by our President, Dr. Kershner, and approved by the Medical Council, will, if accepted by the powers that govern, help to defray the expenses of the physician in caring for patients unable to pay for medical service.

Until such time when the plan will become effective, the physician will continue to do as he has in the past, give his services, medicine and furnish his transportation without compensation.

If the plan is accepted it will immediately become effective, and the physician, by keeping an account of his services rendered to each patient, can collect one-half his regular charges—which is better by far than nothing.

The medical profession of Maine expresses its willingness to cooperate fully with the E. R. A. in providing the best possible care for the needy of the State of Maine consistent with the proper safeguard of the time-honored interests of the patient and the physician alike.

The Maine Medical Association acknowledges its responsibility in so expressing itself and will enter this work for the emergency period only, and shall have the power to judge when the end of the emergency is at hand.

The membership of the Association pledges itself to treat these cases in the home except in an emergency, and when any home factor may affect the outcome of the case unfavorably.

The Maine Medical Association will use every endeavor to preserve the time-honored relation of physician and patient, and to that end shall insist upon the free selection of physician by the patient.

The Maine Medical Association, through its Council, shall be the final judge in case misunderstandings should arise between the local or state official of the E. R. A. and any physician or physicians, also, any future change in policy by the E. R. A. shall be subject to the approval of the Council of the Maine Medical Association. The Council of the Maine Medical Association recognizes that full and hearty cooperation will be necessary between itself and the agents of the E. R. A., in order to prevent unethical medical practices, favoritism to certain physicians, and to prevent bureaucracy manifesting itself in the relationship which will be necessary between the Maine Medical Association and the E. R. A. The Council of the Maine Medical Association shall reserve the right to be the sole judge in case any such unwelcome activities develop.

Who shall receive relief shall be in the hands, solely, of the E. R. A. How best that relief may be furnished will be decided by consultation of the county medical officers and the county agents of the E. R. A.

The fees for emergency relief work shall be on the basis of one-half of the usual fee for the given location for office work and two-thirds of the customary fee of the respective localities for all house visits, operations and obstetric cases.

The Council of the Maine Medical Association will act as the committee of the State Association for emergency medical relief. The officers of each county society shall be the Relief Committee for their respective counties, with power to appoint one or more men in each locality or town to act as a local, or town, Emergency Medical Relief Committee. The officers of the respective county societies, acting as County Relief Committee men, shall have the power to adjust any differences which may arise between any member or members of the medical profession, on the one hand, and any agent or agents of the E. R. A., on the other hand, subject to the approval of the Council of the State Association acting as the State Emergency Medical Relief Committee. Any differences as regards fee shall be settled by the officers of the

county medical society acting as a County Medical Emergency Relief Committee and the county agents of the E. R. A.

A constant contact shall be formed between the county or local Medical Relief Committee and the E. R. A., with the idea of preventing misunderstanding and differences of opinion. Accurate records shall be kept by the County Medical Relief Committees of the number of cases, diagnosis or classification of cases, end results and costs, in order to form some true basis for future work, should the need of such exist beyond a reasonable time.

County Meetings

As the county associations are the constituent bodies which make up the State and American Medical Associations, the various county meetings should be considered of more importance than is too frequently the case. It is these bodies which determine the policies of the larger organizations. It is in these meetings that every member has the opportunity of voicing his ideas on these same policies. The officers and delegates of the county association are bound to reflect the will of the majority of its members as it will be expressed through these meetings. With organized medicine every day assuming more and more significance in the lives of the physicians, an active participation in the doings of the county associations is the right and duty of every doctor.

As the primary function of these societies is scientific advancement, the scientific program is of even greater importance in these meetings. Here is where every practitioner may gain the floor and take part in the discussions of the various medical problems which may be presented. It becomes his "Open Forum." He may present, defend, or criticize, the only limitations being that he shall be courteous, constructive, accord to others the same privileges that he has himself, and that he stick to the subject under discussion. Progress in medicine is made in this manner. Every great truth has first to be substantiated under open discussion.

There is great variation in the types of meetings throughout the state. Roughly, these may be divided into those which have a clinical

session, at which short case reports are given, as well as a session devoted to formal papers, and those which only have the presentation of papers. There is much to be said for the clinical meeting. It encourages more men to appear on the program, presents a greater variety of subjects and develops an interest which is impossible where only formal papers are read. That the best attended meetings are of this type seems a fairly good argument in its favor. As a rule, the smaller societies have not adopted this form of meeting, yet there seems to be no reason why they should not, thereby improving the character of their meetings. It is surprising how much good material there is for clinical sessions even in small communities, if only a little thought is used. There is probably no group in the state that could not plan and present such a program, quite in a class with the larger bodies.

One mooted point upon which there has been a good deal of difference of opinion is that of the importation of speakers. Some of the associations consistently import their speakers from the larger medical centers out of the state. No one can dispute the benefit derived from having such speakers, especially if they be research men, or teachers. On the other hand, to do this to the exclusion of local speakers causes the society to lose the opportunity of developing material from its own body, discourages members from writing and reading papers themselves, and does not make for as free a discussion as when the papers are by local men. It would seem preferable to limit outside speakers to definitely research or teaching subjects, having the purely clinical subjects covered by men within the membership, and, at least, to divide up the meetings so that opportunity will be given the local men to present papers. The imported program looks attractive in print, is entertaining and often instructive, but is rather a lazy way of putting on a meeting and tends to more or less mental atrophy on the part of the society.

The Scientific Committee is endeavoring to encourage the interchange of speakers between the different county associations, feeling that much good will come out of such a policy. To this end, a list of available speakers is sent to each County Secretary for his

guidance. This list is added to from time to time, as more speakers become known to the committee. There is a large number of able speakers, covering a wide variety of subjects, among our membership, who compare very favorably with outside talent. Such interchange increases our knowledge of our own resources, widens our acquaintanceship and makes for friendship and good feeling all around. One county society during the past year has had speakers from six other counties. These, together with ten papers from its own membership, made up eight programs which were extremely interesting and worth-while.

The county meeting should provide the

opportunity for the young man to present his maiden effort. If the time is taken up with imported speakers, no matter how good they may be, he has been deprived of something rightfully his. There is a lot of good material among our younger physicians, but we must develop it, and where is there a better place than in the county meeting? By mixing in a tried and proven speaker, preferably from our state, perhaps from a sister county association, with one of the newer men, not only will we be developing our material, but we will be assured of interesting meetings, with freer and franker discussions than sometimes obtained.

F. T. H.

Editorial Notes

The following resolutions were passed by the Council of the Maine Medical Association at a meeting held at Augusta, December 10th. These Resolutions were forwarded to the Governor, President of the Senate, Speaker of the House, and to the chairman of the Judiciary Committee.

Upon receipt of these resolutions the President of the Senate wrote our Secretary the letter printed below, which was answered by our President, Dr. Kershner.

Ultimately the whole topic was shelved and the special session of Legislature was adjourned without action.

Resolution

I

WHEREAS, No conscientious physician prescribes medicine without such knowledge of his patient as necessitates an examination; and

WHEREAS, Prescribing liquor without such knowledge makes the physician simply a dispenser of liquor; and

WHEREAS, The Weatherbee Bill, so-called, states that physicians "shall make no charge, nor shall they receive directly or indirectly any fee for issuing prescriptions," thus placing the physician where he must do unethical prescribing free of charge, or do his regular work without compensation; and

WHEREAS, The medical profession of the State of Maine, collectively and individually, have from the beginnings of the state, answered every legitimate demand made upon them, and have given

with open hand of their time, skill and money, to a greater extent than any other group or profession in the history of the state; and

WHEREAS, Wherever the dispensing of liquor on prescription has been tried it has been a failure from the administrative standpoint, and a nuisance and unjust demand on the time and social position of the ethical physician; and

WHEREAS, The physicians of Maine feel that the time has come when they shall have the final decision as to the expenditure of their time, skill, and funds; and

WHEREAS, The physicians of Maine feel that the state is placing an unjust burden upon them in requiring them to oversee in any way the distribution of alcoholic liquors;

Resolved: That the Council of the Maine Medical Association, in the name of the Maine Medical Association, hereby protest to the Governor and legislative bodies of Maine, against the passage of any legislation that so infringes upon the rights and social position of the physicians of Maine; and

Resolved: If such legislation be passed, that the physicians of Maine refuse to write or issue prescriptions for liquor in any form.

Signed:

J. L. JOHNSON,
Chairman of Council.

December 10, 1933.

Resolution

II

The Maine Medical Association, by the Council of the Association, hereby votes that, considering the emergency that obtains in the state regarding regulations for handling medicinal liquor and considering that this is a temporary measure, and that other proposed bills are unsatisfactory by reason of expense to the state, as in the case of the

municipal agency proposal, or undesirable for other reasons, as in the Weatherbee Bill, the so-called Druggists' Bill, Legislative Document No. 49, is the most satisfactory measure now under consideration, and the Maine Medical Association hereby approves of Document No. 49 and urges that it be passed.

Signed: J. L. JOHNSON,
Chairman of Council,
REBEKAH GARDNER,
Secretary-Treasurer.

December 10, 1933.

STATE OF MAINE
SENATE CHAMBER
PRESIDENT'S OFFICE

December 12, 1933.

MISS REBEKAH GARDNER, Secretary-Treasurer.

My dear Miss Gardner:—I have your letter of December 11th, enclosing copies of resolutions adopted by the Council of the Maine Medical Association at its meeting of December 10th.

It hardly seems possible to me that the longer resolution can be the serious action of the Council, because if it is a fact, as I understand, that many physicians have for years insisted that alcohol had a real medicinal use and that patients' lives had been forfeited because of their inability to prescribe such alcohol, it seems unbelievable that the doctors would adopt a resolution providing that they would refuse to issue the prescription and let the patient die.

Very truly yours,
HAROLD H. MURCHIE.

December 15, 1933.

MR. HAROLD H. MURCHIE,
Senate Chamber,
Augusta, Maine.

Dear Mr. Murchie:—Your letter to Miss Gardner has been referred to me, as President of the Maine Medical Association.

I fail to understand why a man who holds the position which you hold should manifest so profound an ignorance of the fitness of things as to fail to comprehend the resolutions to which you refer, or the position of the Maine Medical Association in the matter.

The functions of the Maine Medical Association

are to promote a higher standard of medical practice, to coöperate with the Health Department of the State of Maine for the prevention of disease, to treat the sick and to promote amiable relations between physicians and between physicians and the public in general.

The individual members of the Association are subject to call twenty-four hours a day to treat the sick, to prevent illness and epidemics and to improve their own mental equipment.

Some members of the Association believe in prohibition, others do not, but all believe in true temperance and equanimity in all things.

The Council of the Maine Medical Association does not believe that it is a just and proper function of the doctors of Maine to act as a cat's-paw in this liquor business. No self-respecting member of the Association will care to be an agent for the fanatical unreasoning prohibition advocate, on the one hand, or, on the other hand, the shield for the selfish politician who is usually looking for someone on whom to put the blame for his own incompetence.

The history of the medical men in Maine and of the Maine Medical Association will prove that there is no other group who have coöperated as fully in the preservation of law and order, in the defense of their country and its flag and in the self-sacrifice in work for which they never expect a cent of return.

To you, Mr. Murchie, I would say that it would do you good to study the medical history of Maine. You will find that the doctors of the past, or of the present, have never attempted to shirk their responsibilities as such, and you will find just as positively that they resent the implied accusation, in your letter, that for any reason whatever they would sacrifice the life of a patient to gratify any fad or fancy they might hold about any subject.

The President of the Maine Medical Association does know, and wishes you to believe, that the doctors of Maine are among the highest type of citizens in our commonwealth, and that an expression of their opinions and desires should have the respect and courtesy as is given the opinions of any other group or groups.

The President of the Maine Medical Association has many letters and telephone calls from doctors all over the state, expressing their sentiments in the matter. Those sentiments are expressed in the resolutions to which you object.

To date, not one doctor of Maine has expressed to any Councilor or official of the Association sentiments indicating anything but approval of the action of the Council.

It was with confidence in the fairness of the Legislators of Maine that the Council of the Maine Medical Association passed the resolutions to which you object. It is the belief that the Legislators wished an expression of that

great body of men whose lives are devoted to bettering the lot of their fellow men.

I shall take the liberty of presenting this and your letter to our Secretary, and to the press if I see fit to do so.

W. E. KERSHNER,
President Maine Medical Assn.

We regret to announce that we are in receipt of Dr. N. A. Fogg's resignation from the Editorial Board.

We take this opportunity to welcome on the Board Dr. C. Harold Jameson, of Rockland, who will replace Dr. Fogg.

My Guardian Angel

By JAMES A. SPALDING, M. D., Portland, Maine

On the seventh of October last, the Harvard Medical School celebrated one of the three days devoted to the laying of its foundation stone one hundred and fifty years ago. The famous Warren and Waterhouse, and the equally celebrated chemist Dexter, were elaborately and eloquently honored; nothing too wonderful could be said for these famous founders. They deserve all that was said of them, and had I happened to be there in person, I should have been glad to show some of the original letters from these men written to my grandfather.

Had I been asked, as one of the oldest living graduates of the Medical School, to say a few words on that famous anniversary, I should have talked after this fashion:

To-day, the seventh of October, we are celebrating the foundation of this school, and although the hero of my paper was not a founder, he was, in his day, a famous professor of anatomy, and to-day is the anniversary of his death in 1896 — Oliver Wendell Holmes, who, in imitation of the title of his celebrated novel, "The Guardian Angel," I have chosen to speak of to-day as *my* Guardian Angel, for that he was, from the days of his interesting and never-to-be-forgotten words on the day of my final exam-

ination for a Medical Degree in 1870; my Guardian Angel in Medicine — Oliver Wendell Holmes.

After spending the large part of the day of my graduation in answering the various questions of the professors of the staff of the medical school, I arrived at last at the room occupied by Prof. Holmes, and as I stood before him I said, "Now, Dr. Holmes, I want you to be good to me and I'll ask you to put your questions plainly to me, for I am getting deaf in the four years since I left Dartmouth. That is why you may have seen me crouching down in the front seats of your lecture hall during the last four years."

"What a pity," said Dr. Holmes, "for a smart young fellow as you look to be." . . . "Well," said he, after a short pause, "I know of nothing better to ask you than about the anatomy of the one ear of which you are still in possession, although it is not functioning."

So I stood at ease before a blackboard, and with chalk and eraser I drew a figure or two of the ear and told Dr. Holmes all that I could think of about its anatomy and its functions. When I thought that I had said enough, I turned about and stood before Dr. Holmes, and then he, laying both of his hands on my shoulders, spoke in something

like these words: "Now, Doctor, for Dr. Spalding you now are, for all of the other professors have handed in to me a fine report of your examinations and you have passed all of them and I now add my praise of what you have told me about the ear. You deserve your degree of Doctor of Medicine." Then, altering his voice to a sympathetic tone, but still holding me by the shoulders and looking me in the eyes, "Now I am going to say something to you personally for your benefit, as I believe, about your career as a doctor. You are deaf. I regret it exceedingly, for it will hamper you all your life, and so I advise you earnestly, yet kindly, to abandon any hope of gaining a livelihood by the practice of medicine, for you can never hear the murmuring words of suffering patients, nor the whispered farewells of the dying. Leave that, I beg you, to your competitors who have perfect ears. Collect your funds and go abroad and study for the specialty of the eye and ear, which are now growing very much in vogue, and I prophesy for you, from the fine examination that you have passed with me, and from what I hear of you from your other teachers, that you will surely do good work in these two specialties wherever you may plant your feet for a settlement. Good-morning to you, my boy. I wish you good luck for life." Then, shaking hands gently, he let me depart with those words burning in my ears, as I might say, and I have never forgotten them after all these years.

I went abroad soon after that, and after long study in London, Paris, Vienna and Berlin, attending hospital cases every day in the week, wherever I happened to be, and studying the microscope with Edward Nettleship, by the means of kindly letters from Dr. Holmes and others I gained the friendship of the most successful eye doctors in those cities. Of them all I could tell many interesting anecdotes. One of them I recall as perhaps the most typical of all. I was at that time already well versed in German, and I often recall Sir William Bowman handing out to me an autographed letter from von Graefe, the magician of eye surgeons of the world, or a printed paper of his, and of Sir William saying to me with a smile, "Well, Dr. Spald-

ing, will you please go to the lecture room now and tell us soon just what Graefe has lately discovered about the eye." I did as he requested, made short work of the paper or papers of the one who was the leading eye surgeon of the world, but who was, alas, too soon to die. I reported the contents of his letters to the hospital staff and was heartily thanked. Here is another curious item in the history of ophthalmology. Cocaine had not then been discovered, and a large number of operations on the eye called for chloroform. I think I may say truly that in my two years at Morefields, the largest eye hospital in the world, I must have chloroformed more than five hundred people. Knowing my eagerness to learn everything, and to get as close to the surgeon as possible so as to hear something of what was said, the operating surgeon of the day would beckon me to his side and whisper, "Now for the chloroform."

After more than a year in this hospital, I crossed to Paris, but did not see much of interest there, for the best men were off on their vacations for the summer. Arriving in Vienna, I had a good time with Jaeger, world-renowned eye teacher and a remarkable operator. After his hours for the day were over, I visited the clinic of Billroth, who was very kind to me and gave me a seat near the operating bed, and taught me to know Brahms, the great composer. It was a happy day in my life when I could walk through the streets of Vienna between Billroth and Brahms, and attend a perfect performance of the "Requiem" of Brahms and hear him at a concert at which he played the piano phenomenally. Needless to say, in Vienna, I also attended concerts of the Strauss Orchestra, and at one of them I witnessed the indescribable enthusiasm of a Viennese audience at the first performance of one of the Strauss waltzes, "A Thousand and One Nights." To this day I never play that waltz without recalling the vociferous Viennese audience huzzaing, shouting and cheering as Strauss let fall his violin bow at the end of that waltz.

From Vienna I made a short tour through Prague, Dresden, to Berlin. From there, as I have already said, Graefe had died, so that I made my way back to London.

There I met again men whom I have not mentioned before, like Soelberg Wells and Jonathan Hutchinson, said good-by to all of my friends whom I had met at Moorefields and other hospitals at London, not forgetting the very celebrated ear specialist, James Hinton, one of the most delightful men conversationalists I ever met, the best posted Englishman on America with whom I ever came in contact, and last of all, Soelberg Wells, author of a remarkable book on the eye, and celebrated in my memory as wearing the gaudiest neckties and waistcoats that I ever saw on a gentleman.

Reaching Portsmouth, my home, about Christmas of 1880, I waited there for some belated books and instruments, and then, hearing in the summer of 1883 of an opening in Portland, I came here on the 13th of August of that year. I found it a hard road to travel, even as a specialist, because, although I visited all the leading physicians and surgeons in Portland and asked for patients,

specialists had not then come into vogue. The practitioners did not like to recommend the specialists, because they were afraid they would steal their families for general practice. The Maine General Hospital would not employ me on the staff, because the surgeons did all the eye operations; headaches and nervous diseases were not caused by eye-strain, and could not possibly be relieved by mere spectacles, and they were afraid that with my old tin horn I could not hear what the patients and nurses said.

Now I can hear better with an electrical apparatus, and I have gone through a long life as successfully as Dr. Holmes predicted for me, and recalling my numerous adventures and many successful operations and good fortune with several thousand patients, I think that I may well refer my success in life, in spite of my infirmity of hearing, to the kindly advice of Oliver Wendell Holmes, my Guardian Angel.

**Values in Diagnostic Errors*

By C. HAROLD JAMESON, A. B., M. D., F. A. C. S., Rockland, Maine

In 1928, the entering class of the American College of Surgeons was admonished by Dr. Charles Mayo something after this fashion:

"You will do well, gentlemen, to visit clinics and attend society gatherings. Not infrequently will you find revealed nothing new, but from time to time you will pick up here and there some piece of technique, some fragment of information, which may later stand you in good stead. Take that home and cherish it."

To such a receptivity of mind this brief paper is dedicated. It is chiefly clinical, entirely elementary, with no claim to profundity of thought. If it points out certain maxims that appear self-evident, bear in mind that the obvious is not infrequently the easier overlooked. More than once tragedy has stalked in the wake of the neglected

simple appendicitis, and the "lump in the breast" too lightly considered has plagued the casual examiner for many a night. The neglect to order a simple roentgen film has paved the way more than once for dissatisfaction and professional dismay, even litigation. The mortality from appendicitis has increased, some would say, because it has seemed too simple to write about. If platitudes be noted, as they must, exhibit your tolerance with the great physician mentioned above—this may not be your day.

Not all mistakes are buried, thank God. Too often, indeed, they are concealed, locked within the memories of those most intimately concerned. Diagnostic errors must always be costly in one way or another. If any value at all be derivative, it must accrue from an adequate airing of the several circumstances.

* Read before annual meeting of the Maine Medical Association, June 28, 1933.

Various cases have been selected from the series with which I have had contact during ten years of a general surgical practice. In some instances the errors have been my own; in others they have involved primarily the medical attendants of earlier periods in the natural progress of the pathological process. No interest is attached in fixing responsibility.

In the first group of cases I would briefly rehearse instances of errors of omission or interpretation:

H. M., a school teacher of 25 (personal case), presented herself following an automobile accident in which numerous persons were more or less seriously injured. She had moved about actively in the interests of friends, and only after some time (8 hours) found opportunity, in the shape of myself, to obtain information as to whether or not her left knee was seriously injured, which she doubted.

Deluded by her own evident tendency to belittle the injury, my too cursory examination of the region of the knee joint resulted in reassurance and advice to permit subsequent palliative treatment of the "contused" tissues by her family physician.

Twelve weeks later she reappeared. Intervening therapy by two physicians had failed to allay all symptoms, so of her own accord she had caused X-ray films to be taken. Armed with excellent views of the region of knee joint, she now demonstrated the clearly defined patella fracture and offered me a second opportunity to display my intelligence!

O. A., a thick-set fifty-year-old Swede, fell from a staging to injure the left shoulder. Obvious fracture of the upper end of the humerus and left comminuted colles were detailed by X-ray films and properly treated. Personal re-examination of films more leisurely at a later date disclosed previously unrecognized simple fracture of two ribs and of the lower extremity of the left humerus (supercondyla). By dint of good fortune both unrecognized fractures had received appropriate fixation coincident with planned therapy.

Picture the situation had the case happened to be seen by an ill-disposed colleague after the initial treatment. The original interpretation was not my own, yet I was privy to it.

Be your own interpreter at every opportunity, and *strive* for self-reliance in each field allied to your own work.

S. B., aged 64, had suffered a right hemiplegia fourteen months prior to a motor car accident, in which his right shoulder had been injured. Six weeks later I examined the case in the interests of the insurance company, and in view of limitation of motion, particularly of abduction in the shoulder joint, counilled the films which demonstrated to the attending doctor of osteopathy and myself the unsuspected impacted fracture of the surgical neck!

Every traumatic injury involving bony structures must have X-rays *advised*; our modern fingers are too unskilled to disclose the unsuspected fractures by palpation, and I fancy our keener-sensed medical forefathers missed them more than once.

A layman's point of view regarding physical examination of the supposedly well individual recently expressed just criticism. He stated his opinion that such an examination is frequently of the most casual type, particularly if the candidate be a regular patient of the physician. There is undoubtedly a tendency on the part of the examiner to call upon his memory of previous professional encounters with this individual and pronounce an opinion too frequently of favorable character, with no adequate prior investigation. So our efforts to establish routine health examinations are sometimes frustrated, and the practice falls into disrepute. I cite two pertinent cases:

1. Mrs. R., at 55, presented herself for her usual semi-annual routine examination, feeling altogether fit. The prominent New York internist left few stones unturned *except* the very most important. How often the case if one pursues any short cut! Possibly he was so complete an internist that he scorned rectal and pelvic examinations! The patient, being told all was over, inquired of the nurse if the doctor was not going to make an internal examination. "Oh, no! The doctor *knows* you are all right that way."

About nine months later I removed a fibroid uterus the size of a three to four months' pregnancy. Vague symptoms had been present for six months. No harm resulted from the delay in this instance, but the patient lost a large measure of confidence in her New York specialist.

2. A different Mrs. R., at 48, had always been cancer-conscious. Accordingly she betook herself to a highly recommended female gynecologist in Washington, D. C. Occasional "spotting" since the menopause fretted this patient not unduly, and reassurance (for which she yearned) kept her at peace for half a year more before a mild hemorrhage from the vagina following a ride over a Maine road precipitated a visit to my office.

The diagnosis was evident clinically and proven from biopsy. Radium therapy has held this malignant cervix in check for almost three years and perhaps will accomplish a cure. What valuable months were lost as a result of inadequate examination. Our successful attack depends (does it not?) upon getting these cases early, and we *must* not slip up when the patient does his part 100%.

Nature's danger signals may not be ignored with impunity. Why is it that hematuria is still viewed with complaisance, not uncommonly treated by palliation even by supposedly well-trained men? One can surely afford to emphasize this point, even though a hackneyed one. The diagnosis was missed time and again; the end result chargeable to neglect or ignorance or what you will. No less than in death from appendicitis may the

responsibility be definitely placed — *someone* was at fault.

1. G. G. had noted blood-tinged urine at intervals for twenty years, and had time and again reported the symptoms to this, that, and the other physician. He may as well have played with the cultists! Indeed, it was an osteopathic physician who ultimately advised the first cystoscopic examination and that after only one week's contact! Following this examination a written report by the cystoscopist, a regular M. D., described an essentially normal bladder, but pointed out the source of bleeding in the prostatic urethra. Three weeks later my own cystoscopic examination disclosed a large flat tumor of the bladder, which was entirely inoperable, but which required cystostomy as a palliative measure to relieve incessant bladder distress.

It seems most probable that for many years this individual carried about a benign papilloma which at any time could have been recognized and permanently relieved.

Further comment on this case is needless. The urologist probably sees these cases earlier than he did ten years ago, but still there is a goodly percentage of unreasonable procrastination. Hematuria should be investigated immediately upon its appearance. No good can *ever* come from delay, and what tragedy may often ensue!

There is a dangerous pitfall for the physician who will not steadfastly keep that attitude of mind commonly attributed to the gentlemen from Missouri. And particularly is this true for those who are seeing referred cases. Is it not easier to agree with a respected colleague, to take his findings on physical examination, perhaps to start in, so to speak, where he left off? Do we make it a practice to approach the problem with the mind uncluttered by prejudice? And is not that attitude indispensable for complete fulfillment of our own responsibility?

L. W., a young man of 35, came under my care after two days of previous treatment for an infected finger (third, left). The original infection, an apparently simple paronychia resulting from pulling off a "hangnail," had been treated by an excellent physician. I found a patient with an osteomyelitis of the terminal phalanx and a peculiar superficial punched-out low grade ulcer on the dorsum of the left forearm above the wrist joint. He suffered much pain and carried a temperature of 99.5-101.8. During the ensuing period of nearly three weeks the finger infection assumed an indolent appearance with boggy swelling and continuous pain. The ulcer on the wrist enlarged by a sort of "melting" process until the extensor tendons became visible in the midst of grayish granulation tissue. There was little pain in this region. Temperature course ran lower, being not above 99

degrees for the final four days in the hospital. Blood Wassermann had been negative.

It was decided to remove the patient to his home, as he was improved but discontented. He was far from well, however, and there was a question of amputating the finger with loose closure of flaps. Ulcer on wrist appeared to be improving.

Let it be noted that no bacteriological examination had been made from smears of either finger or wrist lesion. The hospital at that time had no organized laboratory, although simple stains, microscopes, etc., were available for the use of any earnest physician!

In taking charge of the case an interest in the etiological bacteria of course stirred my mind, yet I decided that secondary invading organisms in this ten-to-twelve-day-old infection would most likely overshadow and confuse the pathological picture. So I continued to pursue more or less slavishly and certainly thoughtlessly, the course of wet applications, occasional dressings under gas-oxygen anesthesia, and watchful waiting.

A week at home accomplished nothing except exacerbation of pain. A consultation was asked for and accepted. The wise surgeon counselled careful bacteriological investigation, perhaps biopsy from the border of the ulcer on the wrist where his chief interest most properly centered. It appeared advisable to me to urge transfer of the patient to the neighborhood of the consulting surgeon, whose greater facilities and wiser head might surmount the problem which had baffled me. After a few days with this "new deal," a clinical diagnosis of anthrax was established! After a prolonged convalescence, with intelligently directed treatment, this patient got well!

Whenever I review this case, always with chagrin tempered with thankfulness that someone could cure him, I chide myself for several serious failings:

(a) I failed miserably to realize I was dealing with an unusual infection:

(b) My observation of the peculiar ulcer on the dorsum of the wrist did not stimulate my sleeping curiosity as it most emphatically should have done;

(c) My neglect to pursue bacteriological investigation was almost criminal:

(d) My torpid brain failed to place significance in the knowledge it possessed—that the patient was a wool salesman not infrequently picking over samples in his office!

To be on the alert for the unusual is a commendable state of mind, for not every case can fall within the category of appendicitis and fibroid and hypertension and constipation. We have known physicians who seem to think only in terms of African tick fever, uncinaria, tumors of the mid-brain, or what-have-you. With that impractical point of view, we can have no sympathy. Yet one must be prepared to think beyond the realm

of routine when the data of careful history, of painstaking and complete physical examination, and information supplied from competent laboratory examinations do not afford the solution for the diagnostic problem at hand.

I have scored the dangers of bias in approaching any diagnostic problem. In the case to be outlined, failure to observe this axiom rendered my opinion worthless, or at any rate created an impassable barrier against a sound judgment.

In the case of H. L., a male of 54, the medical attendant described the past history in detail as we drove to his home. The antecedent history emphasized a serious accident four months previous (December), when the patient had remained unconscious for three hours from carbon-monoxide poisoning, and had subsequently been confined to his bed for three weeks. Upon resumption of work necessitating manual labor, in March or early April, he was conscious of pains in the extremities and back and abdominal discomfort, which symptoms, though at first vague, became aggravated. The attending physician had several times noted slight elevation of temperature, but had discovered no significant physical findings. The patient had been ambulatory until a week or ten days before my consultation.

By the time we reached the house my mind was thoroughly determined to associate this patient's condition with his carbon-monoxide poisoning, and when physical examination revealed a robust man with some appearance of anemia, a normal temperature, complaining only of backache and showing only a vague tenderness in the upper abdomen, I proceeded to advise a complete blood test (with Wassermann for good luck), suggesting possible G. B. pathology, but really expecting we were dealing with a non-surgical condition involving some form of blood destruction directly traceable to the accident in December.

I have not seen this patient again. Time has elapsed, however, the pathology has progressed, and a more alert physician entered the picture. Armed with some additional data he became afflicted with "divine curiosity," sent the blood to the laboratory with the proper hint, and now knows that this man is suffering from *relapsing fever*.

I do not feel responsible for missing this diagnosis in my one contact. I do realize that my attitude of approach was antagonistic to an intelligent appreciation of the situation; my mind was in a fog created by the history of acute carbon-monoxide poisoning.

Three of my own cases illustrate errors made at the operating table, the first not at all unique but embarrassing; the second due to failure to pursue a routine of intraabdominal palpation; the third dependent upon

hasty intervention in a case previously operated upon.

1. C. H., a 41-year-old woman with bilateral congenital hip dislocation, was sent into a hospital for me to operate upon. Her physician diagnosed her condition as due to uterine fibroids. I examined her somewhat hurriedly for the first time after she was prepared for operation and had received her pre-operative opiate. The abdomen was opened and disclosed an enlarged symmetrical uterus, softish in consistency, rather purplish in color, appearing to me quite typical of a four months' pregnancy. Other physicians in the operating room concurred in the opinion. One wise practitioner who examined her bimanually when the operation was completed opined that I should not have missed this diagnosis, the feel of the cervix and of the softened cervical segment being typical.

Eight months later, in view of the non-appearance of the expected infant, this patient was readmitted and after transfusion of whole blood the abdomen was opened once more. The uterus appeared exactly as before, but as pregnancy was ruled out, hysterectomy was performed. The pathology was explained as the uterus was opened and disclosed a large submucous fibroid.

Such cases should have an Asheim-Zordek test. Unfortunately, the doubt as to diagnosis too often does not arise until one has the abdomen open and must forthwith decide on procedure. I have recently been told, on good authority, that a prominent Boston surgeon is just now being sued for \$100,000 for operation for tumor when pregnancy existed. It would indeed pay to remember Messrs. Asheim and Zordek at the right moment!

2. In the case of J. S., aged 36, laparotomy disclosed the expected adherent retroversion. The appropriate technical procedure was carried out with no thorough palpation of the other abdominal viscera. The convalescence was quite normal, but five days after discharge the patient was readmitted for laparotomy to discover the cause of acute intestinal obstruction. She had a complete obstruction from an annular growth in the upper sigmoid colon (adenocarcinoma), from which she succumbed two years later. This lesion should, of course, have been noted at the first laparotomy.

3. B. G., at the age of 28, was operated upon for ruptured tubal pregnancy, the left tube and ovary being removed. Four years later she was reoperated upon. The attending physician urged this procedure and I find myself guilty of no very careful history or physical examination. In fact, I placed myself on the level of a pure technician. At this second operation a few adhesions were encountered and the significant fact was noted that there was no *right* ovary, that having been removed before my first operation four years ago. At that time I had been content to remove the bleeding tube and ovary without noting the absence of its fellow. Had that feature been recorded I should probably not have plunged forthwith into the latest operation, realizing that most of her symptoms were due to lack of ovarian hormones, which should have been recognized anyway had a thoughtful history been obtained.

Confusion of symptoms from lesions in the urinary tract seems to be a prevalent cause of misdirected abdominal surgery. If this fact were firmly fixed in the medical mind and more common usage were made of the highly satisfactory armamentarium of the urologist, much needless surgery would be avoided. It is the atypical pain of renal or ureteral calculus, the mystifying symptoms of ureteral stricture, the vague distress from the unilateral hydronephrosis associated with anomalous blood supply, and similar conditions that more frequently give rise to diagnostic errors. In my experience I have encountered several examples of the latter error, i. e., missing a uni-lateral hydronephrosis. The most recent case had enjoyed considerable

study in the Out-Patient Clinic of a New York hospital without discovery of the cause of recurrent pain and vomiting. The kidney had been ruled out because the urinary sediment was normal and plain films of the kidney indicated no lesion.

A somewhat more unusual case involved the misinterpretation of the significance of an irritable bladder, and may be rehearsed to advantage:

I. B. was very much a spinster, aged 37. On account of some irritation of the bladder and the demonstration of a complete retroversion of the uterus, a ventral suspension had been made about fifteen months previously. Since this operation the symptoms had been aggravated and her physician referred her for hysterectomy, his opinion being that the uterus was somehow exerting an irritating influence by pressure on the bladder. My own contact with this patient impressed upon me the urgency of the bladder symptoms beyond what

seemed obviously explained. A careful search of the urine demonstrated tubercle bacilli, and this woman is now *well* seven years later, still in possession of her uterus but minus a tubercular kidney!

Urinary symptoms are not to be lightly dismissed, and the modern methods of urological diagnosis are not frequently enough employed prior to laparotomy on patients with obscure abdominal symptoms.

Occasionally to take account of stock is a good practice. Reviewing some of the diagnostic errors of ten years' experience, I have set down a few rules for my own guidance. They are as follows:

1. Traumatism involving bony structures must have X-ray films advised.
2. Short cuts in physical examination are dangerous; hurried examinations lead to error and loss of the patient's confidence.
3. Procrastination in the investigation of important symptoms is inexcusable.
4. Routine cultures must be taken from infected wounds.
5. Remember the possibility of pregnancy in every uterine enlargement, and employ every resource, including the Asheim-Zordeck test, to establish the diagnosis.
6. Employ routine intraabdominal palpation at the operating table in every case whenever not contraindicated.
7. Utilize the methods of routine urological examination in every case of obscure abdominal symptoms prior to laparotomy.
8. Disregard as far as possible your colleague's opinion; form your independent judgments. Shake your mind free from what I call "pre-diagnostic prejudice."

*Deafness: Frequency, Classification, and some of the Common Causes

By STANWOOD E. FISHER, M. D., F. A. C. S., Portland, Maine

Impairment of hearing has become quite an economic factor, as well as a great handicap.

Economic: If there is deafness enough to cause a child to repeat one or more grades,

this, and the cost of maintaining the public schools for the deaf, the burden to the taxpayer becomes apparent at once.

Handicap: There are few jobs where a worker with impaired hearing is not handi-

* Read before the Maine Medical Association, June 16, 1932.

capped or where his efficiency is not in some degree diminished, and some occupations that are absolutely barred to one with defective hearing. "It is a very serious position for an adult to have to give up his or her occupation on account of deafness, oftentimes coming at a period of life too late to pursue another gainful occupation."

Public health authorities, and those interested in diseases of the ear, should work hand in hand to attempt to accomplish the desired results, namely, to preserve the hearing. Some evidence of their work has been seen in several of the larger centers, as the problem is a very difficult one to handle, and can only hope for some measure of success after long-continued effort.

The prevention of deafness is concerned with the detection of impaired hearing in its earliest stages, when normal function can still be restored, or, if not that, at least, when the condition can be prevented from advancing to a point where deafness is the result.

"Deafness," quoting Coates in his article in the *Annals of Otology*, "means such impairment of hearing as to seriously handicap the individual in the performance of his or her chief object in life, be it such as school or college education, the pursuit of gainful or altruistic occupation, or taking one's proper place in society and in the life of the home."

As the general practitioners are the first to see these cases, I wish to impress upon you the great importance of this subject, for it has not received all the attention it deserves, and the seriousness of those so affected in the later years of life, whether or not they receive proper treatment at the proper time.

It is very difficult to estimate the number of people afflicted with deafness, meaning by deafness partial to total loss of hearing. There are no reliable statistics of the frequency of deafness among adults. We do know, however, that of the 2,750,000 men examined for the draft in the World War, 39,000, or about 1½%, were found with aural defects, and most of them were re-rejected. Examinations of school children show approximately that 10% suffer from some defect of hearing. It has been estimated by several authors that there are

3,000,000 school children in the United States with defective hearing and over 10,000,000 persons with some defect in hearing. The U. S. Census of 1930 lists "57,084 deaf-mutes," an increase of 12,000 over the Census of 1920. These children were all born deaf or they lost their hearing before eight years of age, because after eight years they would not lose their speech if they became deaf, so would not be mutes.

These figures give some idea of the extent of deafness found in this country, and the above figures applied to the people of Maine would show 75,000 with some degree of deafness and 2,500 school children with some loss of hearing.

Scientific treatment offers very little benefit for deafness coming on in middle adult life and old age, but in childhood, except those born deaf, we can do a great deal to prevent or to benefit deafness. So it is with the child, we should put our efforts to detect and check any degree of deafness that may be present. Seventy-five per cent of these cases, seen early, can be arrested or benefited. More concerted action should be taken by the medical profession, by the parents, school nurses and school teachers, to detect and to segregate these cases, so that they may have a chance to save their hearing.

Preventive measures fall into two classes. First, those eliminating the known underlying causes of deafness, and second, diagnostic and therapeutic measures for the detecting and curing of deafness at a time when cure is still possible, or of preventing its progress.

Some of the underlying causes: Acute contagious diseases and infections; enlarged and infected tonsils and adenoids; all infections of the upper respiratory tract; abnormalities of the nasal passages and infected sinuses; marriage of those persons with a family history of deaf-mutism or who are congenitally deaf or those with a family history suggesting otosclerosis; curtailment of industrial and other noises. Care in the exposure to noises caused by firearms. Proper surgical treatment of suppuration of the middle ear. The use or administration of certain detrimental drugs, especially quinine, salicylates and

arsenicals, excess of alcohol and tobacco. Proper care of the nose and ears in bathing and swimming pools. Syphilis.

It is not difficult to detect even a slight degree of deafness in school children. An Ingersol watch, whispered voice and a quiet room are all that are required. The watch should be heard 48 inches—each ear. Whispered voice should be heard 20 feet. Exhale and then whisper and you get a more uniform volume. It is necessary to test in a quiet room and to have the child at ease. If there is any nervousness, the test will not be reliable. If the numbers to be tested are large, the audiometer will save lots of time; as many as 40 can be tested at the same time, and the test will measure the least degree of deafness present. The audiometer tests are usually made by school nurses, and when a case is found with impaired hearing, it should be referred to the family physician for further testing, and proper treatment given.

There are two or three 4-A Audiometers in Maine that are being used a great deal, particularly the one that belongs to the Speech Readers' Club of Portland. This machine has very kindly been loaned to several of the near-by towns and cities, as well as the City of Portland, for the testing of school children by the school nurses, and during the past three years there have been several thousand tests made of the hearing of the school children. The percentage of defective hearing in these towns does not vary a great deal—anywhere from 6% to 10%. So if this good work is continued for a few years and a careful check-up made the following years of any who were found to be deficient in hearing, no doubt a great deal of benefit to those so affected will be derived.

A child will not complain of the fact that it cannot hear, until well along in school age, and then often he detects the deafness himself. Many a bright child is unjustly blamed for dullness because he cannot hear what his teacher says. She may not know that his hearing is defective. There are hundreds of thousands of such children in school now. If their ears are neglected, they probably will repeat grades much more often than other children. Any school whose scholars are

tested for hearing, either by the audiometer or whisper and watch tests, can discover its hard-of-hearing children, a large proportion of whom can be saved from lifelong deafness provided they receive care and attention. As was said previously, 75% of these cases seen early can be arrested or benefited. School children, from the fourth to the eighth grades especially, should be tested for hearing every year, and this particularly applies to those whose hearing was found deficient in previous testings, and a careful check-up be made that everything possible is being done to restore the hearing and prevent further progress of the disease. There are millions of adults in the United States whose ear troubles were neglected in their childhood, or later, and who are now permanently deafened. Their number cannot be known, since many of them are reticent, so sensitive about their handicap that they make every effort to conceal it. With increasing deafness year after year, there often comes to the hard-of-hearing a feeling that there is a growing barrier, an invisible wall, between themselves and their fellows. This applies to children as well as to adults. They remain quiet, are reserved, and do not enter class-room work as readily as those whose hearing is normal.

The mechanism of hearing is quite simple. There is a sound wave transmitted to the drum, through the ossicles to the foot plate of the stapes; then this air wave is translated into a wave of fluid in the endolymph, which acts upon the organ of Corti and finally transmits an impression through the auditory nerve to the brain. Any defect in the hearing mechanism external to the internal ear results in what is called conductive deafness. Any defect further in is called perceptive deafness. However, a sharp dividing line cannot always be drawn between the two types of cases, and frequently both types will be present.

Each period of life, childhood, middle age and old age, has its own peculiar type of deafness. During childhood, the first decade, up to ten years, the ear is more seriously affected than during any other period of life. There are several reasons for this: Congenital deafness occurs during this period, and

this is the result of developmental anomalies which involve the cochlea. The frequency of the acquired diseases of the ears of children is a result of the infectious diseases, and also the greater frequency of infections involving the respiratory tract with the harmful sequelæ involving the middle ear. Progressive deafness, as a result of fixation of the conductive mechanism, seen so much in middle life, practically never occurs in children, and progressive deafness produced by the degeneration of the eighth nerve, as encountered in old age, is not met with in children.

Infantile deafness includes those born deaf and those with acquired deafness coming on before eight years of age. *The mutes.* Congenital deafness results from the developmental anomalies that involve the internal ear. More than one-half of the cases come under this heading. Hereditary and consanguineous marriage and intermarriage among the deaf are the most frequent causes—about three-fifths of the cases.

Acquired deafness. In public institutions for the deaf, less than one-half of the children suffer from acquired deafness. These children, as a rule, have had some acute infectious disease. Meningitis heads the list, then measles, scarlet fever, influenza, infantile paralysis, mumps and pneumonia, in the order named. The deafness is the result of a toxic neuritis of the auditory nerve. Less than one-half of the acquired cases have never had any suppuration of the middle ear, and in these cases where there is profound deafness with suppuration of the middle ear, the deafness is the result of some toxic action on the nerve of hearing. In suppuration of the middle ear, one is more concerned with the life of the child rather than the loss of hearing. Pediatricians have a much greater interest in diseases of the ear than the internist, for the obvious reason that the ears of children are much more frequently affected than are those of adults, also the occurrence in childhood of the infectious fevers and the greater frequency of acute infections involving the respiratory tract in children.

Deafness in Children. The tubo-tympanic type. By far the greatest number of cases of deafness come under this heading. The deaf-

ness is not as severe, is intermittent, and usually clears up when proper treatment is given. Common colds, especially when involving the nasal sinuses, are the frequent causes when associated with enlarged tonsils and adenoids. Some children are prone to colds, no matter what treatment be given, until they reach the age of eight or nine years; after this age they seem to get along much better. The bitter cold winds of this climate during the winter months are very harsh on the membranes of the little throats and noses. Some children are fortunate enough to be taken to a warmer climate, and some have to remain indoors most of the winter, for if they go out in the cold air they come down with some respiratory infection which so often attacks the ears, with the usual symptoms, pain, deafness and discharge. Noses should be blown gently lest infected mucus may be forced through the tubes into the middle ear and cause deafness. After an attack of measles, diphtheria, scarlet fever, meningitis or infantile paralysis, the ears should be examined to see if any condition which might cause deafness remains in the tubes leading to the ears. Undernourishment may have a definite relation to the impairment of hearing.

Deafness of Middle Age. Chronic secretory deafness, "catarrhal," and otosclerosis are the forms of deafness met with during this age. Usually between thirty and forty years of age, some people begin to lose their hearing, not as a result of any previous trouble during childhood, but the tissues of the middle ear become thickened and do not conduct the impulses to the internal ear as readily. It may be the result of recent infection, but usually not, and in some cases the ossicles become fixed to the window (opening) leading to the internal ear, by bony ossification. Heredity is the predisposing cause in a great many cases — there is infection and occupational deafness. Both of these conditions respond very little to any scientific treatment that we at this time possess. In the very past few years there have been much more study and research work on these cases, and we are in hopes that something will be found to come to our aid. The research has been on causes and pathology.

Senile deafness is nerve degeneration coming on during the later years of life. It occurs in old people, and we do not expect any improvement in hearing with these cases by any treatment recognized. They tend to grow gradually and slowly more deaf as the years come upon them. It is internal ear deafness, and, unfortunately, these people are not benefited by any kind of hearing device.

Treatment is not spoken of in this paper, but I will say how difficult it is for us to get the hard-of-hearing person to wear any kind of hearing device. Most of them are concealed in the pocket, hanging on the vest

under the coat. A person with poor vision will wear glasses and receive a great deal of enjoyment from them — true satisfaction and comfort as contrasted with false pride and mental distress.

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Frequent publications of the American Federation of Organizations for the Hard of Hearing.

Books

Pain in the Pleura, Pericardium and Peritoneum.

By Joseph A. Capps, M. D., Professor of Clinical Medicine, University of Chicago, with the collaboration of George H. Coleman, M. D., Assistant Professor of Medicine, Rush Medical College, and a foreword by Anton J. Carlson, M. D., Ph. D., Chairman of the Department of Physiology, University of Chicago. Cloth. Price, \$3.00. Pp. 99. New York: The Macmillan Company. 1932.

This is a collection of bedside investigations by these authors which have heretofore been scattered through the literature. Their clear-cut contributions stand to-day as another milestone in our understanding of human pain. During a thoracentesis for a pleural effusion, Dr. Capps noticed that the patient complained of a sharp pain in the neck when the diaphragm was accidentally pricked. That observation was the starting point of these studies. Using a hollow trochar with a silver wire inside, the authors have tested the pain-sense, of the pleura, pericardium, peritoneum and diaphragm, in suitable patients over a period of twenty years. In general, they found the visceral pleura and peritoneum to be insensitive. The parietal peritoneum and pleura gave rise to *direct pain* over the area stimulated. Both pleural and peritoneal surfaces of the central portion of the diaphragm gave rise to *referred pain* in the neck on the same side (usually at the upper border of the trapezius). The peripheral and posterior areas of the diaphragm, both the pleural and peritoneal surfaces, gave rise to referred pain in the hypochondrium and sometimes in the lower abdomen. The lower portion of the fibrous pericardium gave rise to neck pain when irritated. As a rule, pericarditis is practically painless, but may become painful in the presence of such complica-

tions as a large pericardial effusion (which distends the pericardial sac and produces precordial aching or oppression), embarrassment of the coronary circulation, a co-existing myocarditis, or, what is perhaps more frequent, a pleuro-pericarditis.

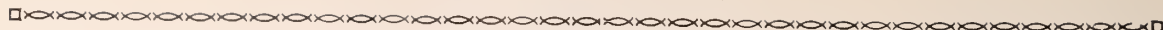
Dr. Carlson says, in the Foreword, "The operating needle in the hands of the doctor has accidentally touched the human diaphragm many, many times, but in the case of the author of this monograph the common mishap struck a spark that has glowed brilliantly for twenty-five years in simple, direct, and conclusive experiments. It is clearly possible for a life busy in the art of medicine to make fundamental additions to the science of medicine" (p. viii).

One may well believe that these pioneer studies will rank with those of Beaumont and Mackenzie.

P. L. GRAY, M. D., Harborside.

Notice

The Aetna Life Insurance Company is searching for *two* doctors who would be suitable additions to their staff of Surgical Advisors. They should be relatively young and interested in making industrial surgery their life work from an administrative viewpoint. One of the positions now open is located in New York City, and the other necessitates considerable travel, with headquarters in one of the larger cities. Any communication should be addressed to: H. E. Cummings, Attorney, 613 Chapman Bldg., Portland, Maine.



Abstracts

"Gestational Polyneuritis"

By E. D. PLASS, M. D., Iowa City, and W. F. MENGETT, M. D., Philadelphia, *Journal of the A. M. A.*, December 23, 1933.

This paper states that this form of polyneuritis almost invariably develops late in the course of, or following an attack of, hyperemesis gravidarum. The chief symptoms and signs are general weakness, usually appearing in the lower extremities, and with the increasing weakness there is an evident atrophy of the muscles. Hyperesthesia in affected parts is extremely variable. Tachycardia is almost uniformly present, and may be among the earliest signs. Loss of recent memory, disorientation as to time and place, and a tendency toward confabulation denotes cerebral involvement.

Less characteristic and more variable conditions are ocular nystogmus, ocular squint, and diplopia, optic neuritis, retinal hemorrhage; central deafness is occasionally evident. Delirium and drowsiness may develop. Loss of positional sense is usually present. The death rate is very high in this condition. When recovery does occur it is usually slow but reasonably complete. Curative treatment is generally ineffective, unless one is impressed with the results of vitamin B feedings in the three patients of Strauss and McDonald. It would appear that their cases were mild in character.

To empty the uterus as soon as the diagnosis is made has not been so effective as to make it the treatment of choice, and in fact in some instances the disease seems to become aggravated after the uterus has been emptied. The diet should be nutritious as well as vitamin containing. Dehydration must be combated. Heat and salicylates are useful in the control of pain. Opiates should be used with caution. Massage and electrotherapy are valuable in the later treatment. Orthopedic appliances are useful to combat contractures.

L. H. S.

"Insulin in the Treatment of Tuberculosis"

By FREDERICK M. ALLEN, M. D., *Journal of the A. M. A.*, December 2, 1933.

The writer's conclusions, after having treated more than eighty cases of tuberculosis with insulin, are that there has been a great revolutionization in results obtained. He states, "The revolution accomplished by insulin treatment has been such that I myself feel that the diabetic patient, properly treated, has a somewhat better chance than the non-diabetic patient with the same degree of tuberculosis," and he has shown that with large dosage prolonged storage of insulin is demonstrable.

Treatment usually begins with five units before each meal and increased many times to forty units, three times a day. Any individual may differ in his insulin requirement at different times. One general conclusion was that in a broad clinical sense, insulin properly used is harmless, and that intestinal lesions are more often an indication than a contraindication for its use.

The most striking and obvious clinical result in a case of suitable type is a gain in weight, appetite, strength and spirits. This result is apt to be greatest in mild, or quiescent cases, and to be less in proportion as fever and intoxication are

greater. The X-ray reports seem more encouraging, but must be confirmed by further study.

L. H. S.

"The Autopsy Problem—Its Solution in Smaller Communities"

By GEORGE W. COVEY, M. D.
Journal of the A. M. A., Vol. 101, No. 16,
October, 1933

In this article Dr. Covey discusses a problem which confronts the medical men of most small communities. He cites the problem as it was in Lincoln, Nebraska, and explains how it was successfully remedied by a method which has developed a keen interest in autopsies.

Their autopsies were substantiated by complete records, recorded histopathologic observations, and properly correlated clinical and pathological observation.

Financial difficulties were settled by group contribution toward the maintenance of a central laboratory. A full-time technician and a part-time stenographer were retained.

The success of the experiment was gratifying. General interest was aroused and the results were decidedly worth while.

This article is decidedly of value, as it treats a problem that is relatively vital to most small communities.

J. G.

"Fundamental Principles of Functional Hearing Tests" Sonnenschein

Archives of Otolaryngology, November, 1933

This is a well-written and comprehensive review of the methods of testing hearing by one of the leading authorities on the subject. It contains nothing new, but is well worthy of the consideration of anyone interested in testing hearing, as it is thoroughly up-to-date. The Eisenhour magnesium forks and sounding rods, which the author has been advocating before so many meetings during the past few years, are fully described.

F. T. H.

"Involvement of the Esophagus in Acute and in Chronic Infection"

Mosher

Archives of Otolaryngology, November, 1933

In his final publication on the esophagus, the author proves that cardiospasm is due to fibrosis of the terminal portion, caused by infection, not only from contiguous organs but sometimes from within the esophagus itself. This is a beautifully written article based upon anatomical material from a series of one hundred autopsy specimens, and well illustrated by many photomicrographs. Pathological changes common in other organs of the body are common in the esophagus. Acute infection arising within the esophagus, either as a superficial ulceration or as edema of the submucosa, with the presence of polymorphonuclear infiltration, may result in fibrosis. In chronic infection there is round cell infiltration, and increase in the subepithelial connective tissue.

Mosher believes that the glands play a large part in infection from within. Infection may come from without, as the author has proven before, such as from gall-bladder disease or from hemorrhage from back-pressure from cirrhosis of the liver. The last part of the paper is devoted to a description of the author's technique in examination of the lower esophagus, especially with his barium bag.

F. T. H.

"Routes of Infection in Otogenous Meningitis" Gatewood and Settler

Archives of Otolaryngology, November, 1933

Infection may spread from the middle ear and antrum to the cranial cavity by direct extension, by dehiscences and canals for nerves, by the lymphatics or by the blood stream. Extension by way of the blood vessels, or lymphatics, leads to a diffused meningitis. Positive blood cultures are indicative of a hematogenous infection. A case of fulminating meningitis, apparently of hematogenous origin, is reported.

F. T. H.

"Acute Perforations of Gastro-duodenal Ulcers"

By SAMUEL J. FOGELSON, M. D.,

Surgery, Gynecology and Obstetrics, November, 1933

In gastric ulcers, perforation occurs most frequently near the pylorus, and next most frequently, in the order named, on the lesser curvature, the posterior wall, and the greater curvature. In duodenal ulcer it occurs most frequently in the first part of the duodenum, occasionally in the second part and rarely in the third. Samuel J. Fogelson, M. D., states that of the perforations which he has studied, 44% were duodenal, 34% were pyloric or juxta-pyloric, 17% occurred in the cardia, and 1% occurred on the posterior surface of the stomach.

Perforation is usually single, but may be multiple. The opening may be patent or closed, by fibrin or by adhesions, to adjacent structures. The

gastroduodenal contents may or may not be spilled into the peritoneal cavity. The peritoneal contents will vary with the time that elapses after the perforation, the character of the gastroduodenal contents, and the type of lesion. When the gastroduodenal contents are acid, the peritoneal contamination is usually sterile. With time, it tends to become alkaline, increase in toxicity and become septic.

The first symptom of perforation of a gastric or duodenal ulcer is a sudden excruciating pain, usually in the epigastrium, but occasionally localized or referred to the right upper quadrant of the abdomen. Depending upon diaphragmatic involvement it may radiate to either shoulder. The pain is followed by vomiting, hiccough, shock, thoracic respiration, fever, leucocytosis, a board-like rigidity of the abdomen, and a decrease of liver dullness. The differential diagnosis must rule out appendicitis, cholecystitis and acute pancreatitis.

The treatment indicated is immediate operation. If possible, the operation should be done under local anesthesia, supplemented, when necessary, by ether, preferably by ethylene. If an incision is made in the right iliac fossa because of an erroneous diagnosis of appendicitis it should be closed and the correct incision made. An erroneous high incision on the right side may be changed to the Mayo-Robson right oblique incision. The diagnosis is confirmed by the escape of gas when the abdomen is opened and the presence of gastric or duodenal contents in the peritoneal cavity. The surgical procedure depends on the findings. After cauterization of the ulcer the perforation may be closed by two layers of interrupted sutures. In some cases cauterization may be omitted. If necessary, a gastroenterostomy may be done in addition to closure of the perforation. In cases of large callous ulcers, which are difficult to close, a tube may be sutured into the perforation to convert it into a gastric or duodenal fistula, and later withdrawn. In the cases of young patients in good physical condition who come to operation early, resection may be considered. In addition, a complementary jejunostomy may be indicated. The choice of operative technique must depend upon the judgment of the surgeon.

W. H. B.

County News and Notes

Cumberland

The meeting of the Cumberland County Medical Society was held at the Eastland Hotel, December 29, 1933.

The meeting was called to order by the President, Dr. Leighton. It was voted to pass over the reading of the minutes of the last meeting. The annual report of the Secretary was read and accepted. The annual report of the Treasurer was read and accepted.

The following made application for membership: Francis W. Hanlon, Brunswick, Me.; H. Eugene Macdonald, Portland, Me.; Thomas Martin, Portland, Me.; Donald H. Daniels, Portland, Me.; Richard S. Hawkes, Portland, Me.; Virginia C. Hamilton, So. Harpswell, Me. They were voted into the Society by temporary suspension of Section 1, Article 3, of the Constitution, the motion having been made by Dr. E. E. Holt, Jr., and seconded by Dr. Roland Moore.

The unfinished business, the Board of Health the Council was voted to be accepted and spread upon the records.

Dr. Alex Burgess, of the Medical Department of the Rhode Island Hospital and Brown University, versus J. R. Woolf, Chapter 1, Section 8, of the By-Laws, was read, and the recommendation of demonstrated an "Oxygen Tent" perfected by himself and son. This apparatus is simple, inexpensive and practical, and apparently does all and perhaps more for the welfare of the patient than the more expensive ones on the market at the present time.

For guests we had with us Rev. Morris H. Turk, Miss Alice Waldo, Federal Relief Supervisor for Portland, Ex-Governor Percival P. Baxter and William B. Nulty, Assistant U. S. District Attorney.

The speaker of the evening was Charles Gordon Heyd, M.D., Vice-President of the American College of Surgeons, and probable choice for the Director of the Post Graduate Hospital in New York. He gave a remarkably interesting talk on the subject, "Some Social and Medical Impressions of Moscow in 1933." He talked for over an hour to a group of approximately three hundred people, and none were seen to leave the room. His talk

was supplemented by several lantern slides which he had taken personally during his trip to Russia.

The report of the Nominating Committee was presented by its chairman, Dr. Roland Moore, and the committee's slate was elected as follows:

President, Dr. E. E. Holt, Jr.

Vice-President, Dr. E. S. Abbott, of Bridgton.

Auxiliary Legislative Committee, Dr. Charles Sylvester.

Committee on Public Relations, Dr. Luther Brown, chairman; Dr. C. W. Peters, Dr. DeForest Weeks.

Delegates to serve two years: Dr. William Holt, Dr. Adam P. Leighton, Jr., Dr. Ernest S. Files, Dr. S. Judd Beach. (The four delegates who have one year more to serve are Dr. George Tibbetts, Dr. Eugene Drake, Dr. Owen Smith and Dr. E. G. A. Stetson of Brunswick.)

Councilor for three years, Dr. Frank Lamb. (Dr. H. M. Swift has one more year and Dr. Little has two more years to serve.)

The meeting adjourned at 10.30 P. M.

Respectfully,

WILLIAM HOLT,
Secretary.

Dr. Charles Sylvester, chairman of the Auxiliary Legislative Committee, gave his report for the year, together with a resolution, as follows:

The recent action of the Maine Medical Council in regard to prescriptions should be endorsed and extended by our Association.

The discussion of individual opinion upon this or that form of liquor control is never in order in *this* body. A quasi-prescription for procuring alcohol for beverage purpose, whether paid or not, is no concern of our Association, and is entirely outside its function. Our function is the prevention, control and treatment of disease, and as an Association we repeat the demand that our prescriptions, whether alcoholic or not, shall be legally filled by the registered druggists in this state.

We have received formal complaints by members of this Association against the present medical examiner-coroner system. Corrective legislation approved by the state medical council failed of passage this year. Therefore, our action must lie with the next legislature. Under our primary law there is no one in office but the office seeker—the only language he is sure to understand is the vote. Our power to vote has some influence *before* it is cast.

A report was presented by your committee earlier in the year in regard to the record of legislative representatives—or misrepresentatives—and such report was adopted. A record of a certain vote upon an osteopathic measure was ordered placed on our minutes. We are anxious that our action in regard to public legislation shall be a constructive one. We do not wish it to appear that we merely express our irritation at some one event and then forget to take preventive action before the stage is set for new legislation. We are entitled to know our liabilities; they should show in the red, and we must not increase them. We wish to complete the year's report by recommending that the Secretary of this Association, prior to the next primaries, be instructed to secure the record of candidates upon disease prevention and treatment, such information to be given by him to any member requesting it, whether in open meeting or without.

We also wish to present a report, with request for action by this Association, upon the administration of a public health measure. It is not

presented in any spirit of criticism against the present health administration, but rather with a desire to increase the efficiency of public health protection by placing its administration entirely in the hands of the State Health Bureau where it now legally rests. As a police function for the protection of the public, the application for a personal license or certificate to handle food is comparable to the application for a motor license but does not entail so much risk of life. We believe that in each case the safety of the public demands a check-up. We as a medical association object that the application for food handler's certificate, with its personal description and history, coupled with a casual observation, should be styled or accepted as a *medical examination*. Such cheap claim and the usual cheap fee is belittling to the medical profession, and tends to bring it into disrepute, as evidenced by the popular comment of "petty medical graft," which we resent.

We believe that certification of food handlers is a government function for public protection, and should be done at the health office of each municipality. Its cost should be borne by the government in return for the license fee paid by the proprietor. It should not be imposed upon the waiters and kitchen help, who, as a rule, are now working for a pittance, and who, to get or hold their jobs, are forced to pay for certificates.

If, on inspection of the applicant and his information as to disease contacts as filed at the health office, it shall be deemed necessary by the Health Officer, then should an *actual* physical examination be ordered. If any applicant elects to pay his private physician for such examination, it shall remain entirely under the authority of the Health Officer whether such examination be accepted.

Resolved, by the Cumberland County Medical Association, that the Director of the Bureau of Health be asked to secure revision of the regulation concerning bi-annual examination of food handlers, a regulation which was enacted with the best intent, but which is now proved to be inadequate for the protection of the public, an expense to the workers for whom it was not intended, and a miscarriage of medical skill.

And we request that our representatives in legislature shall give such assistance to the State Health Bureau as needed by statute to enable such protection of the public to be secured through each municipal health office under regulation of the Director of Public Health.

C. B. SYLVESTER.

PORTLAND MEDICAL CLUB

The annual meeting and banquet of the Portland Medical Club was held at the Falmouth Hotel, on Tuesday evening, December 5th, at 7.00 P. M.

Dr. Paul Wakefield, Director of the Central Maine Sanitarium, gave a very interesting and instructive talk on "Public Health in China and the United States."

Dr. Alfred W. Haskell was elected President.

Seventy-one members were present.

ALICE A. S. WHITTIER,
Secretary.

Franklin

The annual meeting of the Franklin County Medical Society was held at the American Legion Building at Farmington, September 18, 1933.

Dr. W. E. Kershner, of Bath, President of the

M. M. A., and Dr. E. W. Gehring, of Portland, President-Elect, talked on various matters of the organization, and Dr. Paul Wakefield, of the Fairfield Sanitarium, talked interestingly of his experiences in China.

Dr. James Rerd, Joel R. Wellington and Glenn V. Butler were elected to membership.

Officers for the coming year were chosen as follows:

President—True E. Makepeace, Farmington.

Vice-President—A. I. York, Wilton.

Secretary and Treasurer—G. L. Pratt, Farmington.

Censor for Three Years—J. W. Nichols, Farmington.

Delegate to M. M. A. 1934 Meeting—A. E. Floyd, New Sharon; Alternate, C. W. Bell, Strong.

Member of Legislation Committee—G. L. Pratt, Farmington.

G. L. PRATT,
Secretary.

Kennebec

The annual meeting of the Kennebec County Medical Association was held at the Augusta General Hospital, Thursday afternoon and evening, December 21st, 1933.

The Clinical Session, at 4.30 P. M., was presided over by Dr. John O. Piper, Waterville, President, with the following program:

1. "Recent Fracture Case," by Dr. Richard H. Stubbs, Augusta.

2. "An Interesting Blood Case," by Dr. V. T. Lathbury, Augusta.

3. "Lead Poisoning," by Dr. Louis E. Fallon of Augusta.

4. "Case of Myelogenous Leukaemia," by Dr. Norman B. Murphy, Augusta.

There was a short business meeting, and dinner at 6.30, followed by election of officers, as follows:

President—Dr. George W. Alexander, of Gardiner.

Vice-President—Dr. Maurice Priest, of Augusta.

Secretary and Treasurer—Dr. Frederick R. Carter.

Council of the County's Society—Dr. Frederick T. Hill, Waterville, Dr. Chalmers G. Farrell, Gardiner, and Dr. Adolphe Gingras.

Delegates to the Maine Medical Association—Dr. Wm. J. O'Connor, Dr. Frederick R. Carter and Dr. John O. Piper; Alternate, Dr. Leon D. Herring, Winthrop.

At the Scientific Session, two papers were read:

1. "Massage and Mobilization in the Treatment of Recent Injuries," by Dr. Samuel H. Kagan, Augusta.

2. "Spontaneous Meningeal Haemorrhage," by Dr. J. O. Piper, Waterville.

There were twenty-six members present.

FREDERICK R. CARTER, M. D.,
Secretary and Treasurer.

News and Notes

Radio Address

Dr. I. Francis Gregory, Bangor, gave a radio address from Station WABI, November 6th, entitled, "Quack and Quackery." In this talk Dr. Gregory exposed certain "Itinerant Healers," who have been appearing in this state, and advised his

listeners to consult their family physicians when in need of medical advice. He called attention to the dangers inherent in many of the nostrums on the market sold as "cures," revealing that not only were these worthless, but some were actually hazardous. It is hoped that such frank talks by the profession will further assist in the education of the general public.

Application blanks are now available for space in the Scientific Exhibit at the Cleveland Session of the American Medical Association, June 11th to 15th, 1934. The Committee on Scientific Exhibit requires that all applicants fill out the regular application form and requests that this be done as early as convenient.

The final date for filing applications is February 26th, 1934. Any person desiring to receive an application blank should address a request to the Director, Scientific Exhibit, American Medical Association, 535 North Dearborn Street, Chicago, Illinois.

Resolution Opposing the Construction of More Government Hospitals

WHEREAS, the construction and maintenance of more government hospitals would impose additional taxes upon a people already staggering under the burden of taxation, and

WHEREAS, existing civilian hospitals are sufficiently numerous to care for all the sick, except mental cases, among veterans and other government employees who may be entitled to such care, and

WHEREAS, government hospitals, at great cost of construction and maintenance, are now depriving excellent civilian institutions of like character, of patients whom they are well equipped to serve at less cost, the per diem rate during the patient's stay, the cost of construction not entering into the computation of rates, and

WHEREAS, civilian hospitals need and are justly entitled to this business, and

WHEREAS, government hospitals have made and are increasingly making terrible inroads upon the practice of civilian doctors, by treating many of their patients gratuitously, be they veterans with or without service connected disabilities or other government employees, many of whom are receiving compensation and do not require hospitalization, and

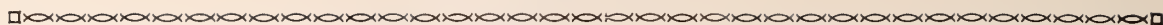
WHEREAS, while this pernicious practice continues, civilian doctors are taxed their share for the construction and maintenance of these unnecessary government hospitals, therefore, be it

Resolved, that the Council of the Maine Medical Association, acting by and with authority from the entire body, does hereby oppose the construction of more government hospitals as being in every sense wasteful of the resources of the people, and subversive of the best interests of taxpayers, patients and of the medical profession, and be it further

Resolved, that you, our representative, are hereby urged to oppose vigorously any legislation that will endanger further the medical profession and its workshop, the civilian hospital.

REBEKAH GARDNER,
Secretary, Maine Medical Association.

December 10, 1933.



The President's Page

TO THE MEMBERS OF THE MAINE MEDICAL ASSOCIATION :

The year 1933 has ended, with the affairs of your Association in as good shape as possible under the present abnormal conditions. The machinery of the Association is running smoothly, with a whole-hearted coöperation of the membership, committees and officers.

The program, as outlined for coöperation in Medical Emergency Relief, has been approved by the Council and by such county societies as have reviewed the agreement. This agreement has been forwarded to the American Medical Association and to the Federal Emergency Relief office. This Maine plan of agreement for the work has been complimented by the Secretary of the American Medical Association in a letter to the Secretary of our Association.

The Council of the Maine Medical Association met again on December 10th, and among other matters acted with vigor, in the form of resolutions, regarding a particular vicious liquor bill which was before a special session of the State Legislature. This bill was so worded that it threw all the blame for intemperate use of alcoholic liquors, as well as all responsibility for proper control of alcoholic liquors, upon the medical profession. In other words, the bill appears to have been drawn with the object that, if passed, it would throw all the odium for the whole dirty business upon the medical profession of this state. The resolutions, which the Council adopted and which are printed in this issue of the JOURNAL, were sent to the Governor of the State, to the President of the Senate, to the Speaker of the House and to the proper committee. As you will see elsewhere within these covers, the President of the Senate had the temerity to address a most asinine letter to the Secretary of our Association. Your President considered that letter an insult to the profession of Maine and answered it in the name of the profession. That letter is also printed herein.

The Legislature was called in special session by the Governor to meet an emergency in the affairs of the State of Maine, and, incidentally, to pass some sort of temporary liquor legislation in order to control the traffic and in order to provide revenue for the state until the people had an opportunity to vote whether or not to retain the 26th amendment to the Constitution. How miserably they failed is obvious to all. How totally incompetent the majority are is plainly written in the petty bickering and small-town political log rolling which took place at Augusta. The dominant party in the Legislature, in their desire to discomfort and discredit the Governor, lost all proper perspective of their position and the reason for their election.

It is an abject picture to see such a body so helplessly floundering for want of just ordinary decent leadership. When we review the nauseating history of that special session, is it any wonder that men have difficulty in retaining faith and confidence in our form of government. It is conservative to say that the nincompoops who are the present leaders of that body lacked the intelligence to know the difference between serving themselves, their special interests and playing childish, petty politics, on the one hand, and serving their constituents and their state on the other hand.

The President of your Association wishes for each individual member a Happy and Successful New Year.

W. E. KERSHNER, M. D.

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By the

American Medical Association

In a letter, dated February 27, 1933, mailed by us to the physicians of Greater Portland, we made the following statement: "When it has been proven to the satisfaction of the medical profession that it is necessary to elaborate on milk by the use of the ultraviolet light, then Old Tavern Farm will be among the first to do so."

The A. M. A., Committee on Foods, has approved and accepted Steenbock Process, U. S. Patent No. 1680818, which covers the irradiation of milk by ultraviolet light for the purpose of building up its vitamin D content. (J. A. M. A., Vol. 101-15).

1. In an editorial (J. A. M. A., Vol. 101-22, P. 1728) the statement was made that the incidence of rickets is still too great and will continue to be, until some cheap, generally available, agreeable source of vitamin D is provided.
2. Supplee emphasizes the fact that since milk is the sole or major article of diet during the age of susceptibility to rickets, the desirability of having available a milk containing an adequate amount of vitamin D for the prevention and cure of rickets, is obvious. (J. A. M. A., Vol. 101-5, P. 402.)
3. Hess and Lewis demonstrate that ".....milk can be rendered antirachitic by a short exposure to ultraviolet radiation." (J. A. M. A., Vol. 101-3, P. 181.)
4. "Antirachitic milks, especially irradiated milk, require a surprisingly small number of rat units, from 35 to 40 daily, to confer protection or effect healing."
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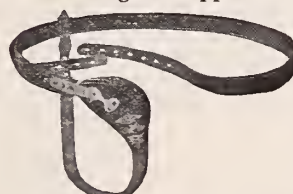
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The State and County Medical Societies

Vol. XXV

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No. 2

Editorials

The Clinical Meeting of the Association

The clinical session which will be held at the Eastern Maine General Hospital in Bangor, on February 21st and 22nd, and sponsored by the Maine Medical Association, should be well attended by the physicians throughout the state.

The program has been carefully planned, and will be made up of a series of talks, ward walks, and discussions on medicine and surgery. This is no less than the teaching of the modern methods of medical and surgical procedure.

From these talks and the discussions to follow (and all attending are earnestly requested to express their ideas obtained from their own experiences) a great deal of benefit should be derived, both by the visitors and the members of the hospital staff.

This two-day meeting is also an endeavor

to get the physicians together more than once each year, and should its success be great enough, then more meetings will be held during the future years in the various cities throughout the state.

The physicians of Maine need to be more closely allied, they should be more mindful of the importance of their county and state organizations. It was of great interest to hear our late Daniel Robinson relate the efforts of our predecessors to organize the Maine Medical Association. It is for us to so strengthen this Association by our personal endeavors, that it may be as great as, and stronger, if possible, any other organization in the state.

Your presence at this meeting will help to strengthen our Association, so bring your ideas, and say "hello" to those who work with you and for you.

L. H. S.



*Program of the Clinical Session of the Maine Medical Association
to Be Held at the Eastern Maine General Hospital, Bangor*

TUESDAY, FEBRUARY 20TH

Clinic Room

Nurses' Lecture Room

10.00-11.00 Post-operative Pulmonary Complications Drs. B. L. Bryant T. S. Moise J. L. Johnson	
11.00-11.30 Urology Dr. E. S. Merrill	11.00-11.30 Eye Dr. M. C. Moulton
11.30-12.00 Surgery Dr. H. M. Goodwin	11.30-12.00 Dr. E. L. Herlihy

Luncheon at Tarratine Club

2.00-2.30 Thyroid Dr. H. Robinson	2.00-2.30 Gynecology Dr. Magnus Ridlon
2.30-3.00 Neurology Dr. H. E. Pressey	2.30-3.00 Surgery Dr. E. B. Sanger
3.00-3.30 Pathology Dr. H. E. Thompson	3.00-3.30 Pediatrics Dr. A. W. Fellows
3.30-4.00 X-ray Diagnosis Dr. F. B. Ames	3.30-4.00 Nose, Throat and Ear Dr. H. W. Johnson

Evening

Penobscot County Medical Society Meeting

WEDNESDAY, FEBRUARY 21ST

10.00-12.00 Orthopedics Drs. Woodcock Silsby Skinner in Wards and Orthopedic Department	10.00-10.30 Dr. Asa Adams 10.30-11.00 T. B. Chest Surgery Drs. W. R. Gumprecht T. S. Moise 11.00-12.00 Proctoscopy, Colitis, etc. Drs. C. H. Burgess H. C. Knowlton
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2.00-2.30 Surgery Dr. J. B. Thompson	2.00-2.30 Ear, Nose, Throat Dr. H. Butler
2.30-3.00 Medicine Dr. L. H. Smith	2.30-3.00 Urology Dr. C. Blaisdell
3.00-3.30 Surgery Dr. C. M. Thomas	3.00-3.30 Post-mastoid Neurological Complications Drs. Pressey Moulton Johnson
3.30-4.00 Dr. Scribner	3.30-4.00 Dr. L. Ford

Dead Wood and Live Timber

Our energetic President of the State Association has several times remarked that he could name 75% of the men attending the last annual meeting of the Association and that he could name 75% of those who would be in attendance the coming year. Unfortunately he was not exaggerating, and, while giving him credit for a wide acquaintance and a good memory, this is rather deplorable. Out of a membership of approximately 700, an average of 200 attend these meetings. The county meetings are proportionately better attended, but here, as well, there is plenty of room for improvement. To a large extent it is pretty much the same faithful who are always present at these meetings. If it were more of a rotating attendance it might be better for the good of the Association as a whole. And these chronic stay-at-homes are really just those who need the benefits of these gatherings the most.

We do not mean to imply that a man is not a good physician if he does not attend the meetings of his state and county associations, but we do insist that he would be an even better medical man if he did avail himself of these opportunities. Medicine is not an exact science and is ever changing and advancing. The greatest educational facilities may be found in these meetings of the different medical groups, devoted to scientific advancement and self-improvement. There is something stimulating in the discussions of the problems involving medical men and their combat against disease, which cannot be found in any other way. Systematic reading of medical literature is very much worthwhile—every progressive physician will average an hour's reading a day—but it can never take the place of frequent attendance and participation in these meetings of the medical associations. Those who habitually attend realize this. Those who never go, or who have lapsed from attendance, are missing something of great value and satisfaction to them.

It has been said, many times, that one gets out of these meetings just about what he puts into them, and this is true. One should start by attending regularly, and then begin to participate by taking part in the discussions, by bringing up questions which seem worthy of discussion by one's confreres and by presenting papers. The social associations with one's fellows are worth a great deal alone. Medical men are usually a peculiar race. They get along best with those who speak their own language. This being so, it is especially desirable that the men in the various counties and the state get to know each other better by these meetings.

We must realize that we are in a changing era. Harvey Cushing's Presidential Address at the last Congress of American Physicians and Surgeons was entitled "Medicine at the Cross-roads." In these difficult times it behooves physicians to stand together and to work together. Medical organizations, devoted to scientific improvement rather than political advancement, assume an even greater significance. More and more will the individual doctor need the help and backing of his societies. He should contribute his part by becoming an active participant in their work. Live timber is needed, not only to build for the future, but to preserve the present structure. There is no place for dead wood. But unlike the forester it is not necessary to trim off what might appear to be dead wood. The material is so sound underneath that all that is needed is to infuse a little invigorating sap into it to make it live, and make the whole structure sound and time-enduring. The best places to obtain this infusion are at the state and county meetings. Let the county officers arrange for interesting meetings to be held regularly, and then encourage and support them by your attendance. And, lastly, let's tax our President's memory at our next annual meeting. He will enjoy it and your Association will benefit thereby.

F. T. H.



*Caisson Sickness

By A. A. STOTT, M. D., F. A. C. S., Bath, Maine

It was with a great deal of pleasure and some misgiving that I accepted the honor conferred upon me of speaking to you upon "Caisson Sickness," or so-called "Bends." My hesitancy in accepting was due to the fact that I had never before attempted to address my fellow practitioners upon any medical or surgical topic and the limited knowledge of the pathology of this condition. May I ask your indulgence in my feeble attempt to narrate to you my limited experience and reading in this rather unusual condition, a condition which is coming more and more to our attention as work under compressed air increases.

Caisson sickness is defined as a group of symptoms caused by working under increased atmospheric pressure, and this is true except that those symptoms may be prevented to a great extent by proper management of the air worker, and I should amend this definition by saying that this disease, as it is now seen, is a group of symptoms caused by working under compressed air without the necessary regulation of the working conditions and proper decompression. It is true that all cases cannot be prevented, but the serious ones, with paralysis, dyspnoea and death, can.

May I explain here that the normal atmospheric pressure is 14.7 pounds per square inch and the pressure in caissons is measured as gauge pressure or absolute pressure. Gauge pressure is, as its name implies, the pressure shown on the gauge and absolute pressure is gauge pressure plus 14.7 pounds, or gauge pressure plus the normal atmospheric pressure. Please bear this in mind, as I shall speak of absolute pressure later.

This subject is very large and includes the effect of an increase of CO₂ in the caisson and an excess of dissolved O. in the blood, but I shall confine myself to an elementary discussion, disregarding all causative factors of disability in this work except the N. embolism of the circulation, and shall use the sinking of piers as my type of work, although the same principles apply to diving, sub-

aqueous tunneling and escape from submarines with the new Momsen lung.

In the building of piers a caisson is first sunk and consists of a four-sided structure of the desired size, with double sides for the introduction of concrete to sink it as the digging progresses, and a concrete deck. Through this deck passes a tube 2 to 4½ feet in diameter, in which is a bucket attached to a cable. The bottom of the sides of the caisson have a steel cutting edge about 2 feet wide. The tube extending to the bottom of the caisson through the concrete deck communicates above with a chamber which is called the air lock, and is large enough to hold several men. This air lock is separated from the tube by a trap, which opens downward and has a trap at its top opening inward. It is also provided with intake and exhaust valves, the latter 1½-inch for slow exhaust and a 4-inch for rapid work, these valves being controlled either within by the person locking in or out or by the lock-tender without.

All locking in and locking out is usually controlled by the lock-tender, and a series of whistles from below tells the lock-tender what is desired. There is also an air supply to the caisson direct, entering either through or below the deck, and an exhaust which keeps a uniform pressure and proper ventilation in the caisson itself.

The simplest caisson uses one tube for workmen and discharge of material.

Let us enter the caisson. We drop through the port in the top of the air lock and this is closed. The pressure is raised either by our guide within or the lock-tender without, and we are told when we feel a pressure on our ears to hold our nose and blow to equalize the pressure on the membrana tympani. The pressure is gradually raised until that in the air lock equals the pressure in the caisson, approximately one pound for every two feet the caisson is down, and then the lower trap is opened by the lock-tender and we descend in the bucket which is used to remove the mud and sand. It is rather an awe-inspiring

* Read before the annual meeting of the Maine Medical Association, June 28, 1933.

trip, I can assure you, as the darkest night never approached the absolute blackness of this journey. But we soon arrive at the scene of operations, if all goes well, and we find ourselves in an electrically lighted room braced with timbers, and with men working all about us, digging and filling the bucket, pulling the whistle-cord for it to be raised, the swish of air through the 4-inch valve as the bucket is removed from the air lock and emptied, and then the descent of the receptacle to be repeated over and over. While here there is very little sensation except that one cannot whisper in 2.5 atmospheres, there is a slight feeling of increased exertion in breathing, voices have a peculiar nasal sound, and speaking seems to be with some effort. Then we re-enter the bucket, the whistle signal is given and we are raised to the air lock, decompressed to the atmospheric pressure, and climb out through the upper port. This is the daily procedure of each worker under compressed air, except that he works and we did not.

There are certain injuries which can happen to the worker when locking in which are not caisson sickness *per se*.

There seems to be a divided opinion among authorities regarding the physiological effects of working under air, and the difficulty of correctly interpreting their findings is due to the excitement attending the experimental work in this type of case, but I believe the following conclusions to be correct:

The frequency of respiration may be slightly diminished, but is not much changed.

The diaphragm sinks and the lungs are expanded, owing to compression of the intestinal gases, thus giving relief to asthmatics.

The respiratory exchange measured by the CO₂ output, at rest, is not altered up to 6 atmospheres.

The blood pressure is not appreciably altered, and this I believe to be true, at least in so far as deleterious effects are concerned, as I have seen men with systolics of 180 m.m. of mercury in the air with men with a systolic below 100 m.m. of mercury, and neither suffered from any noticeable inconvenience.

Pulse frequency is usually lowered, but may be due to conditions other than the air. A rise in temperature may be noted, but is

probably caused by hard work in a wet, warm caisson, and not to air *per se* or increased oxidation.

There is no marked nor constant variation in the normal urinary constituents up to plus 6 or 7 atmospheres for several hours, but free N. collects in the urine and may be demonstrated. The circulation is not altered in locking in, as evidenced by the lips and the radial pulse. It is true that on locking out the men may be pale, possibly cyanotic, wet and chilled with the supersaturated air if the lock be not properly warmed, but this is not due to the compressed air.

Regarding the etiology of caisson sickness, I think all authorities agree that it is due to nitrogen bubbles in the circulating blood occluding, as nitrogen emboli, the capillaries and larger vessels according to the percentage of saturation of the blood and tissues, which is determined by the amount of pressure the worker is under and the length of time of his exposure, but there appears to be a difference of opinion as to how this occurs. And may I say here that experiments with tracheal breathing invertebrates where the air enters the tissues direct show them to be immune, thus proving the necessity of some circulating medium. Some investigators believe that a distension of the lung sufficient to rupture the capillaries is necessary for the air to enter the circulation, but they found by bandaging the chest that this did not occur, so I believe their deductions not applicable to caisson sickness, inasmuch as in a caisson the pressure within the lung and around the chest, in fact on all parts of the body exposed to the air, is equal.

Leonard Hill, Lecturer of Physiology of the London Hospital, who has studied this subject quite exhaustively, explains the etiology as follows: "Any gas in contact with a liquid is taken up in simple solution until a state of saturation is reached, the amount depending on the coefficient of solubility of the gas in the liquid, the pressure of the gas and the temperature of the liquid. Blood passing through the lungs is in contact with a wet film of protoplasm, and this, in turn, is in contact with the air breathed. The blood takes up the gases of the air in solution, and, if exposed to compressed air, will dissolve O.

and N. in an amount increasing in proportion to the pressure."

We know from our teachings in physiology that atmospheric air contains approximately 20 percentage by volume of O., .04 per cent. by volume of CO₂ and 79 per cent. by volume of N., and that the O. tension of the air being much greater than that of the venous blood, and the CO₂ tension of the air being less than that of the venous blood, the diffusion of O. is from the air to the blood and the CO₂ from the blood to the air. So, under increased atmospheric pressure, the O. and N. are both forced into the blood, by a process of diffusion, if you will, the increased proportion of O. taken up combining with the hemoglobin, in excess of the 18½ volumes which are normally present, but leaving approximately 5/10 per cent. for each atmosphere, simply dissolved in the plasma as is all of the nitrogen. All free O. in solution and 8 per cent. of that in combination disappears when the blood reaches the tissues, being used up in the oxidative processes of the body. If more O. than is used by the tissues remains in the blood and the tissues become flooded by free O., then the condition so ably described by Dr. Drinker and his associates at the Harvard School of Public Health, supervenes and we have either an acute O. poisoning with acute pulmonary oedema, convulsions and death, or a chronic O. poisoning, which shows a slowly progressive pulmonary pathology. Under ordinary pressures the amount of O. in solution in the blood is negligible, but helps the worker to work more easily. So much for the O.

The N., which is the particular disturber in this disease, is likewise taken up by the blood in solution and passes to the tissues, which contain fat and water principally, as the coefficient of solubility in watery parts at body temperature is .9 per cent. and five times that for the fat, the fat comprising 15 to 20 per cent. of the body weight, and the water 66 per cent. The tissues have different rates for saturation to N., and those which saturate last desaturate more slowly, and this accounts for the lapse of several hours between decompression and the appearance of symptoms in some cases. The N. having reached the tissues remains there so long as

the increased pressure is maintained, but when the pressure is lowered, it comes from the tissues to the blood and thence through the lung to the expired air, and if the pressure is reduced in such a way that the rates of exchange between the tissues and blood and the blood and air are equal, all goes well, but a rapid lowering of the pressure, allowing the N. to come from the tissues to the blood faster than it is eliminated by the expired air, causes bubbles to form in the blood, first with corpuscles as points and then upon each other. It is this occlusion of the blood vessels by these bubbles which causes caisson sickness, and the susceptibility of an individual depends upon the amount of fat in his tissues, the rapidity of his circulation and the relative proportion of his blood volume to his body weight.

The symptoms of caisson disease vary with the part of the circulatory system occluded and seldom occur under 2.4 atmospheres absolute or on short exposure to high pressures even with rapid decompression. Often the symptoms are so varied as to defy localization. One authority characterized them as of sudden invasion with the maximum intensity at the beginning, of a polymorphic nature with usual and rapid recovery and symptoms, which, once established, nearly always retrogress and hardly ever increase in severity.

Dr. D. L. Keyes, in 3,700 cases which came under his supervision during the building of the tunnels under the East and North Rivers in New York, classifies his cases as follows:

Cases showing pains in various parts, with or without local manifestations.

Those with pain and prostration.

Cases showing symptoms referable to the central nervous system, either brain or spinal cord.

Cases with vertigo or so-called staggers.

Patients showing dyspnoea or sense of constriction of the chest (chokes).

Cases with partial or complete unconsciousness with collapse.

The fatal cases occur in those showing prostration, collapse or central nervous system involvement, but the greater number of cases are the so-called "bends," showing pain in the extremities, usually about the knee,

elbow or shoulder and due to the slow desaturation of fasciæ, tendon sheaths, bursæ and other unyielding tissues. Pain in the abdomen is greatly feared by experienced air workers, as it is often a forerunner of spinal cord injury. Mottling of the skin, a serious symptom, cutaneous emphysema, with itching and eruption, and brawny induration may occur.

The cases suggesting embolism of the cerebral vessels are not numerous because of the better circulation of the brain, but when they occur show more or less complete hemiplegia, with increased reflexes on that side. In Keyes series there were only four, and all recovered in seven days.

By far the most serious trouble, if we except the cases of sudden death from pulmonary N. embolism, occur in the white matter of the antero-lateral columns of the dorsal and upper lumbar segments of the spinal cord, and may vary from a transient weakness of one or more extremities to a complete paraplegia, with paralysis of the bladder and rectum. Most of these cases recover completely, a few with some evidence of permanent cord injury, but the most severe develop a disseminated or localized myelitis, with its well-known symptoms, complications and termination. My own experience has been with the lighter forms of cord injury, which recovered completely with recompression and massage.

Most cases of caisson disease can be prevented, especially the more serious, by selecting young, thin men with a good circulation and pulmonary ventilation, men temperate in habit and with no evidence of organic disease, careful supervision of their mode of living and diet, regulation of the time of the shift to the amount of pressure used, and slow decompression, either by the uniform or stage method, with exercise by the patient. In explanation may I say that by the uniform method is meant a regular, slow dropping of the pressure at the rate of one pound every two or three minutes, while in stage decompression the pressure is dropped in three minutes to one-half the absolute pressure of the caisson, and then a certain number of minutes about 24 from 30 pounds pressure after an eight-hour shift, allowed to complete the

decompression. Working conditions in the caisson have their bearing, and as air upon compression becomes saturated with moisture and warmth, the caisson should be cooled to 60 F. by the wet bulb thermometer and properly ventilated. Warming of the air lock and opportunity for exercise both help.

The only effective treatment of this condition is recompression in a hospital lock, the pressure being raised to caisson pressure, although pains will be relieved before this is reached, and then reduced slowly at the rate of one pound every two or three minutes, the patient meanwhile moving about or being massaged by an attendant. This drives the N. back into the tissues and allows it to return to the blood more slowly. Some authority has said that men are raised from the dead by recompression and I can say "Amen" to this, as I have seen men in collapse, with almost imperceptible pulse and respiration, unconscious, with a fine froth on the lips, walking after ten minutes in the hospital lock. I have seen a sinking boss who came up under the 4-inch valve become unconscious and fall from a bench while rubbing his legs for the relief of bends, recover in a short time under recompression. Of course, any damage to the tissues occurring before the nitrogen bubbles are driven back out of the blood is not remedied by recompression and must receive the usual treatment for the condition existing. Two or three recompressions may be necessary, and recovery will occur in this number if at all under this treatment.

Let me emphasize, in closing, the necessity of complete and frequent examination of experienced as well as green hands, as there is no immunity to caisson disease, although a variation in individual susceptibility exists, careful selection of men with supervision of their mode of living and habits, proper working conditions, short exposures to high pressures, regulated and proper decompression, easy accessibility to a recompression lock manned by a trained and efficient personnel, and the observation of all workers for several hours, or until the usual danger period has passed.

Experiments in the breathing of O. during decompression may make possible work at

higher pressures than the 60 pounds now regulated by law in some states.

REFERENCES

Leonard Hill, M. B., F. R. S. "Physiology of Work in Compressed Air."

F. J. C. Smith, J. W. Heim, R. M. Thompson, and C. K. Drinker, M. D. "Bodily Changes and Development of Pulmonary Resistance in Rats Living under Compressed Air Conditions."

F. J. C. Smith, Granville A. Bennett, M. D., J. W. Heim, R. M. Thomson, and C. K. Drinker, M. D. "Morphological Changes in the Lungs of Rats Living under Compressed Air Conditions."

R. M. Thomson, C. P. Yaglou, and A. B. Van Woert. "A Pressure Chamber Installation for Studying the Physiologic Effects of Pressures Varying from Six to Sixty Pounds Per Square Inch Absolute."

I. B. Polak and B. H. Adams. "Traumatic Air Embolism in Submarine Escape Training."

*The Effect of a 1% Solution of Silver Nitrate on the Growth of Gonorrheal Organisma in Vitro

(Its Clinical Significance with respect to the Crede Technique)

By JULIUS GOTTLIEB, M. D., F. A. C. P., and WILLIAM FREEMAN, M. D.

A report of the National Committee (1) for the Prevention of blindness, published in 1924, calls attention to the fact that the blindness from ophthalmia neonatorum has been remarkably reduced in many parts of the country, presumably as a result of the Crede prophylactic method. It cites, as one of the examples, that in the State of Massachusetts there has been no blindness reported for five years. A recent report, however, by M. S. Mayou (2) in the *British Medical Journal* states "that there is no evidence of ophthalmia neonatorum decreasing in London in the last fifteen years. . . . I think the use of silver nitrate for prophylactic treatment is strongly to be deprecated."

The authors of this paper, some five years ago, felt in accord with the view recently expressed by Mayou and were prompted to conduct a survey of the Robinson Memorial Hospital, with the view of studying the value of the Crede prophylactic technique. This work was begun in the laboratories of the Massachusetts Memorial Hospital and completed in the Hawkins Laboratory in the Central Maine General Hospital. It was felt that, although the statistics on the decrease of general blindness may be correct, the causes of such a reduction may be due to factors other than the employment of the Crede technique.

The survey disclosed that there were approximately 500 deliveries in the half year studied, and that 1% of the infants delivered developed gonorrheal ophthalmia neonatorum in spite of the employment of the prophylactic method in question.

Assuming that from 3 to 5% of its maternal population were previously infected, the maximum transmission possible would result in a proportional number of cases of ophthalmia neonatorum. On the basis of this estimate, it may be concluded that the application of a 1% solution of silver nitrate failed to exert its reputed prophylactic effect in from 33 to 20% of the cases so treated. This survey, together with occasional reports from practicing physicians that gonorrheal ophthalmia developed in spite of the Crede technique, stimulated the writers to pursue the problem.

The technique employed at this hospital is to puncture the apex of the capsule with a common pin (sterile here, but outside more often not sterile) and to express one or two drops of the solution directly on to the cornea of each eye. In this institution it is the practice to allow the silver nitrate solution to remain indefinitely. In others it is washed out one minute later with either saturated boric acid solution or sterile normal physiological saline.

* From the Hawkins Laboratory of the Central Maine General Hospital.

Inasmuch as no animal other than the human offers a suitable media for the growth and study of these organisms, our experiments were confined to the use of artificial media, test tubes and artificially grown organisms.

General Technique Employed

The source of the organisms was in all instances, except one case, from early acute urethral gonorrhea in the male. These cases were taken from the Genito-Urinary Clinic for Venereal Diseases at the Memorial Hospitals.

The clinical diagnosis of gonorrhea was made from the clinical history plus the findings of the typical Gram negative, intracellular diplococci found in the direct, stained smear, from the urethral discharge.

All smears of the urethral discharge were made by using Scudder's technique (3).

All smears were stained by Kopploff's (4) alkaline modification of the Gram stain.

All stained smears were studied and diagnosed by the writers of this paper.

Two types of culture media were used for the growth of the gonococci. The first fifteen experiments were carried out using a Liver Infusion Agar Slant as described by Park (5). The last fifteen experiments were carried out using Torrey's (6) combination of hormone, semi-solid, medias.

The first twenty-seven experiments were taken from cases in which a diagnosis of acute urethral gonorrhea in the male was made.

The last three experiments were taken from a case of gonorrheal arthritis (clinical diagnosis) in a female.

All positive cultures were checked for the typical carbohydrate reaction in the differential media as described by Torrey (6), and by stained smears.

Special Procedures

As soon as a clinically-positive diagnosis was made, a direct culture, on the respective media used, was made directly from the discharge (Column E).

Then an ordinary common pin, previously sterilized by heat, was covered at its distal extremity for about one-fourth of an inch, with as much discharge as would adhere to it.

Simultaneously, a standardized Massachusetts Board of Health silver nitrate capsule containing approximately $\frac{1}{2}$ c. c. of a 1% silver nitrate solution in a hermetically sealed wax capsule was punctured by a previously sterilized needle, causing an opening into the contents of the capsule from 3-4 diameters wider than the common pin.

The urethral discharge-covered pin was carefully inserted into the opening of this capsule without touching the edges, so that the discharge was completely immersed in the silver nitrate solution. This was well stirred and mixed for a full minute. In the last nine experiments, instead of the Board of Health capsules being used, small, previously heat-sterilized test-tubes were used containing 2 c. c. of a fresh silver nitrate solution (1%). The contaminated pin, as above, was immersed into the solution and well stirred and mixed for a full minute.

The mixed contents of either the capsule or the test-tube was then emptied directly on the culture media. The object of this procedure is to demonstrate the effect of a direct mixture of silver nitrate solution and the gonorrheal discharge planted directly on media. The results are tabulated in Column F.

Using a similar technique as above, with the same patient, the contaminated silver nitrate solution was first emptied into 5 c. c. of previously sterilized normal, physiological solution of saline (0.75%). This combination was then thoroughly mixed for a full minute and a platinum loopful of it was surface-streaked on its respective media.

Normal body secretions contain as a minimum a strength of saline equal to that of the physiological strength. Normal tears contain 1.46% sodium chloride concentration. The application of silver nitrate solution, as low as 1%, in the eye usually causes lachrymation and increases eye-secretions. Therefore the employment of sodium chloride solution is used, which, when mixed with silver nitrate solution, forms an inactive, insoluble salt, silver chloride, which almost instantaneously is precipitated. This mixture was cultured to determine whether or not the gonococci are still viable after the inactivation of the silver salt, or permanently killed. The results are tabulated in Column G.



TABULATED FORM OF RESULTS

A	B	C	D	E	F	G
1	8/20	176077	Pos.	Pos.	Neg.	Pos.
2	8/29	"	"	"	"	"
3	8/20	176078	"	"	"	"
4	8/27	"	"	"	"	"
5	9/3	"	"	"	Pos.	"
6	8/27	176248	"	"	Neg.	"
7	8/31	"	"	"	"	"
8	"	144118	"	"	"	Neg.
9	"	171606	"	"	"	Pos.
10	9/3	176417	"	"	"	"
11	"	150118	"	"	"	"
12	"	176327	"	"	"	"
13	"	165352	"	"	"	"
14	"	176502	"	"	"	"
15	"	176494	"	"	"	"
16	10/15	177281	"	"	"	"
17	"	"	"	"	"	"
18	"	"	"	"	"	"
19	"	177331	"	"	"	"
20	"	"	"	"	"	"
21	"	"	"	"	"	"
22	"	177333	"	"	"	"
23	"	"	"	"	"	"
24	"	"	"	"	"	"
25	10/24	177281	"	"	"	"
26	"	"	"	"	"	"
27	"	"	"	"	"	"
28	10/29	Arthritis	Neg.	"	Pos.	"
29	"	"	"	"	"	"
30	"	"	"	"	"	"

Key to the Table

Column A is the experiment number.

Column B is the date it began (the year is 1927).

Column C is the hospital number of the case.

Column D is the results of the direct stained smear.

Column E is the results of the direct and proven gonococci cultures.

Column F is the results of the cultures after the exposure to nitrate solution alone.

Column G is the results of the proven cultures after exposure to the silver nitrate solution and treatment with the normal saline.

Experiments 1-15 were carried out using the liver infusion agar slants.

Experiments 16-13 were carried out using Torrey's combination of semi-solid medias.

No culture was reported positive unless it gave, in addition to a positive smear, the typical, carbohydrate reaction of gonococci as described by Torrey.

Discussion of the Table

Thirty independent experiments were conducted. Sixteen different patients served as the source of supply for the organisms that were studied.

Twenty-seven of the experiments were carried out from patients in which there was a smear-positive diagnosis of acute gonorrheal urethritis in the male. Three experiments were conducted from one patient in whom the clinicians had diagnosed a gonorrheal arthritis. In Column D it is found that the direct smears were negative, while in Column E the results show that the direct cultures were positive.

Only those experiments (the thirty recorded in the table) which showed a proof positive gonococci culture on the direct (Column E) were further studied.

Of these experiments, there were twenty-six (87%) which showed a persistently negative growth after the exposure to the silver nitrate solution alone. The other four experiments (13%) showed a positive growth (Column F). It is worthy of note that three (experiments Nos. 28-30) of these four cases were from a patient with gonorrheal arthritis. The other experiment (Experiment No. 5) was from a patient who was discharging pus for at least one week. Previous (earlier acute) experiments with the same patient (experiments 3 and 4) gave results similar to the majority of the others studied. The explanation for this leaves room for further study.

Twenty-nine, or 97%, of these experiments gave a positive gonococci growth after exposure to silver nitrate solution and subsequently treated with normal saline, as shown by Column G. The result of experiment No. 8 is not in accord with the majority of the results.

DISCUSSION

The lack of prevention in approximately 25% of the possible cases of ophthalmia neonatorum by the Crede prophylactic method as employed in the Robinson Memorial by competent and experienced attendants is too high a failure to be totally disregarded. This preliminary study indicates that the efficacy of silver nitrate solution when instilled in the eye may be rendered inactive by irritating products. This paper also indicates that in vitro the gonococci are not destroyed by a 1% silver nitrate solution when exposed to it for one minute, but are apparently rendered inactive. It may well be that the silver nitrate forms a coating, either about the phagocytic leukocyte or even perhaps about the organism, which, when treated with physiological saline, is destroyed again, leaving the organism in the free active state. The experiments in vitro were carried on in a manner to as closely approximate as possible reactions which most likely occur in the Crede technique.

If, in established cases of ophthalmia neonatorum, it is not acceptable by many physicians to use silver nitrate solution as a therapeutic agent, the writers contend that this attitude supports the view of its inefficacy as a prophylactic agent.

The controls of the positive smears in all cases were checked by standardized cultural characteristics and accepted carbohydrate reactions. It may be argued, however, that 5 c. c. of normal saline employed in the experiments may serve as a source of error. Further study is therefore well indicated in this direction. It may also be argued that no physiological saline is present in the newborn eye, inasmuch as tears are not physiologically present for at least three or four months. There is no question, however, that precipitated silver nitrate causes sufficient irritation to create a serous and oftentimes a purulent reaction containing varying sodium chloride concentrations. Silver nitrate irritations are not uncommon in the eye where the solution is employed.

CONCLUSION

A 1% solution of silver nitrate in the pres-

ence of physiological saline cannot be depended upon to inhibit the growth of gonorrheal organisms in vitro. In view of the above findings and the clinical reports of gonorrheal ophthalmia neonatorum, considerable doubt is cast upon the efficacy of the Crede prophylactic treatment. The reduced incidence of blindness and gonorrheal ophthalmia neonatorum where so reported may well be due to factors other than the employment of the Crede technique.

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*The Maine Medical Journal

By W. H. BUNKER, M. D., Calais, Maine

Mr. President and Members of the Washington County Medical Society:

Having recently been appointed to the Editorial Staff of the MAINE MEDICAL JOURNAL, I naturally find myself somewhat interested in its birth and existence, as well as its future development. So at this time, at the request of the Secretary, I shall discuss briefly some of the important facts in this regard.

In 1907 there were two medical societies operating in the State of Maine, each with a membership of 400 and dues of \$2.00 per year. One was known as the "Maine Academy of Medicine and Science," which met twice a year for scientific and social purposes. This society had published a JOURNAL for

many years and had built up an excellent library. The Maine Medical Society met only once each year, at which time papers were read and discussed, and a splendid banquet served after the usual business had been transacted.

During the year 1908, through the influence of Dr. F. Y. Gilbert, Secretary of the Maine Academy, and Dr. Erastus Holt, it was agreed that the Academy should disband in favor of the Maine Medical Association and turn over their small fund, together with their library of 1,500 volumes, on the condition that the latter start a state MEDICAL JOURNAL and continue the library. In 1910 the House of Delegates appointed a committee of five to begin the JOURNAL and provided

* Read before the Washington County Medical Society, October 12, 1933.

\$700.00 for that purpose. However, not all of this sum was used at that time, and the library has not been made use of to the extent of the original plan.

In these early days of the JOURNAL, Dr. Frederick Green, Assistant Secretary of the American Medical Association, rendered valuable assistance through his very friendly attitude. He explained that almost without exception the state societies that published journals were the most active and progressive, also that the JOURNAL would serve as an official organ of the Maine Medical Association, would broaden the information of its individual members, and facilitate the business of our medical meetings. After twenty-three years of publishing the MAINE MEDICAL JOURNAL I am convinced that his remarks were true.

The first issue of the JOURNAL was printed in December, 1910, and Dr. Frank Y. Gilbert, President of the Maine Medical Association, was appointed Editor-in-Chief, which position he held for twenty years, and I wish to go on record as saying that the existence of our state JOURNAL today is due to the untiring interest and labor of Dr. Gilbert, who devoted most of his spare time to the study and research of medical problems and who always showed keen interest in the fact that a strictly ethical JOURNAL, clean from cover to cover, should be read by the members of the medical profession of the State of Maine. Two assistant editors were appointed in Portland, and an Editorial Board, consisting of one member from each county in the state. It was at that time, and always has been their duty, to send in to the JOURNAL editorials, county news, suggestions and criticisms, to encourage and urge members to write papers for publications, to send in scientific papers read at county meetings and to secure ethical advertising matter from local druggists and supply houses, these being subject to the approval of the Board of Councilors. At the request of the state editors during the early life of the JOURNAL, the American Medical Association provided the Co-operative Medical Advertising Bureau, to pass on all of the national advertising of the state JOURNAL. This service has proven of great value to all of the small journals.

Benefits. The principal benefits are to men in the rural districts unable to attend the county meetings, who are thus able to keep well informed as regards the working of the county society and keep abreast of the times, if they are so disposed. Another benefit is the education of preparing a paper and reading it before the society, along with the discussions which usually follow. Still another is the fact that our MAINE JOURNAL was one of the important instruments necessary to put across the Medical Defense Act, which was finally passed in 1920, which was accomplished mainly through the efforts of Drs. F. Y. Gilbert and James A. Spalding, who repeatedly presented it before the legislative body.

At this time I would like to comment on the excellent service which Dr. Spalding, as our Necrologist, has rendered for many years and at the present time as Editor-in-Chief.

The JOURNAL is also responsible for securing the services of a full-time Secretary, which has been a great addition to the Society. It has been a most useful bulletin for the activities of the Board of Health, and last, but not least, it has served as a bond of friendship between the individual members scattered over the entire state.

It would not be fitting to elaborate on the history of the MAINE MEDICAL JOURNAL without paying tribute to the late Dr. Philip W. Davis, who over a period of years rendered such faithful service to the JOURNAL, both in the capacity of Editor of the JOURNAL and Secretary-Treasurer of the Association.

Expense. The JOURNAL has been self-supporting up to the present time, the advertisements covering the cost of publication, but unless there is more co-operation between the members of the Association and the editorial staff it is very doubtful if it will continue so. The JOURNAL is printed by the Marks Printing House, Portland, Maine, at a price of \$2.00 a year or 20 cents a copy.

Before closing, I would like to place a few thoughts in your minds relative to the progress of the JOURNAL. We are apparently satisfied with the progress of the county society and the JOURNAL, but we should not feel so elated after reviewing the activities of our

JOURNAL not so far remote. For example, on March 14, 1911, one year after the JOURNAL was first published, the items printed describing the Washington County meeting held at Calais were far more elaborate than any of the present day. The first issue of the JOURNAL, in December, 1910, gives a detailed description of the 58th annual meeting held in the Y. M. C. A. building in Bar Harbor, June 29 and 30, with Dr. Galen M. Woodside, President of the Maine Medical Association, presiding at the meeting. The name of Dr. E. H. Bennett, of Lubec, was presented as President-Elect by Dr. A. D. Sawyer and seconded by Dr. S. E. Webber, of Calais, who made an excellent speech, now on record. Thursday, June 30, 1910, Dr. S. E. Webber occupied the chair, while Dr. Woodside delivered the President's address, and the acceptance speech of Dr. Bennett was

one of which the Washington County members might well be proud.

It was at this same meeting that Dr. Bennett read an elaborate paper covering the diagnosis and treatment of "Spleno-Myelogenous Leukæmia" in detail. The discussion which followed was introduced by Dr. Gildersleeve, of Philadelphia, and Dr. Franklin Whittier, of Brunswick. I wish to make plain the fact that things were actively done in those days, as well as at the present. In closing, I would like to make a final appeal to all the members of our county society to get behind the men who are trying to carry the burden of our county and state medical societies and support them, along with our STATE MEDICAL JOURNAL, so that, in years to come, those who follow us in the profession may be able to feel with confidence that things were also accomplished in the days of our activities.

The Patient

By JAMES R. GARBER, M. D., 1117 S. 22nd St., Birmingham, Alabama

Thus far, the burden of these remarks has been thrust upon the shoulders of the doctor. Let us now turn briefly to the patient, the remaining side of the triangle of the doctor, his office and the patient.

A member of the profession could scarcely discuss this subject without an admixture of emotions, feeling that efforts in behalf of patients bring about the dual tribute of benediction and malediction, a resulting dual tribute, because, in the crucible of life there is an unbalanced proportion of an impure compound, creating an inferior product. In such an instance, faith tainted with suspicion, truth besmeared with innuendo, justice shackled with the irons of prejudice, facts mixed with misrepresentation, ceaseless labors attacked by stinging criticism are the ingredients of the impure compound that patients too frequently place into the cup of life from which the doctor must quaff his share of happiness and blessings. It is recog-

nized this is a severe indictment against the laity, but permit a citation of two rather universal customs that warrants the same.

Tale-bearing, or just plain tattling, is the first of these faults. Uninformed of things medical and armed with half truths and distorted versions of a specific case, the layman proceeds to spread reports—talking, stabbing reputation with a reckless abandon. Charity is forsaken, responsibility evaded, and the limits of propriety and the territory for gossip know no bounds. On the other hand, the doctor in possession of facts, observes a code of gentility, of respect, of trust as a salute of loyalty to his patient. His could be an overwhelming victory against misrepresentations, but severe is his loss in the broadcast of unfavorable talk, swallowed up as it is, in the immensity of space. Peculiar is the practice of medicine as it reflects the characteristics of heart and mind of the physician. Then cruel is the act of tattling. It should cause

the blush of shame, a riotous bewilderment that should remind the perpetrator that by such conduct he, too, reflects the characteristics of heart and mind. Knowledge is the very antithesis of ignorance, and unless this wholesome attribute can lead one to the possession of facts and into a thorough investigation, the mantle of friendliness, of fair play and of brotherly love falls from the shoulders of man.

The second fault of the layman is the malpractice suit. This threat and actuality hovers over the head of the physician as the guillotine awaiting the rapier-like thrust of the executioner. Unwarranted and illogical is the vast majority of cases. Malpractice suits invoke a defensive mechanism on the part of the doctor in the discharge of his duty, and, in addition, creates a timidity in him, and the profession in general, that is caustically referred to as "medical ethics." In assuming the responsibility that is attendant upon any medical or surgical case, the physician places the table stakes of his career upon the roulette wheel of fortune. Motivated by a desire to serve mankind and clinging to the consciousness of the good that must be in his fellow-man, the doctor answers the call of duty. He serves his best. If individual limitations operate to thwart the full fruition of desires and complete results, he, nevertheless, has served his best. Often the queer twist of nature checks him in his pursuit, but even so, he has served his best. What more can any man in any vocation do? Why penalize the servant of your selection and to whom you voluntarily turn in search of health and life? The very fact that physicians must carry liability insurance is a travesty and is an ineffaceable scar upon the higher and finer attributes of the layman. Let us pause long enough for someone to mention any other profession, other than the dental, in which the member must seek such protection.

An unbiased analysis of the origin of malpractice suits reveals a startling fact. Seldom, if ever, does the man accustomed to assuming responsibilities appear as the plaintiff in such litigation. Seldom, if ever, does the man who is in the habit of discharging obligations appear in such a role. Then, the vast majority of malpractice suits is originated by the ignorant, irresponsible and ne'er-do-well species of mankind—by men in quest of something for nothing—lacking in manhood to admit inferiority, lacking in stamina to play a square game. Life should record a better fate than this for any man. Posterity should receive a finer legacy. The humanities should awaken inspirations. The creed of universal sympathy and a common brotherhood should achieve its own reward.

In this discussion no brief is held for the charlatan—none for the doctor who misinterprets the significance and traditions of the medical profession.

Notice

The American College of Physicians

The American College of Physicians will hold its Eighteenth Annual Clinical Session in Chicago, with headquarters at the Palmer House, April 16-20, 1934.

Dr. George Morris Piersol, of Philadelphia, is President of the American College of Physicians, and will arrange the Program of General Sessions. Dr. James B. Herrick, Emeritus Professor of Medicine of Rush Medical College, Chicago, has been appointed general chairman of local arrangements and will be in charge of the Program of Clinics. Mr. E. R. Loveland, Executive Secretary, 133-135 S. 36th Street, Philadelphia, Pa., is in charge of general and business arrangements, and may be addressed concerning any feature of the forthcoming session.

Abstracts

"Anaesthetics, Narcotics and the Sick Man"

By GEORGE CRILE, M. D.

American Journal of Surgery, January, 1934.

A review is presented of the present conception of protoplasm with its proteins, lipoids and electrolytes. The living thing must function, depending upon oxidation with coincident radiations of varying wave lengths, some short enough to displace electrons from atoms with the production of an electric impulse. The double effect of this "knocking off of the electrons" is the origin of bio-electric currents and the production of chemical affinity in the atoms leading to the synthesis of protoplasm. Experiment shows an optimum electrical potential for every healthy tissue which is lowered by the state of anaesthesia, and when the potential is zero, the organ or tissue is dead.

An anaesthetic is defined as "an agent that is capable of interfering with the genesis of bio-electric currents and the short wave radiations required for normal activity. The general anaesthetic affects all of the tissues and organs of the body, local or spinal correspondingly less. Inhalation anaesthesia is conceived of as a state analogous to death "removed from death only in inverse ratio to the depth of the anaesthesia."

Narcotics likewise effect all the protoplasm of the body.

With the known effects of anaesthetic and narcotics on the tissues and organs in health, note the critical emergency created when the vital organs (kidney, heart, liver, brain), already crippled by disease, are whipped nearer to death by general anaesthetics. The ensuing fatality is the anaesthetic's own.

In the old person electrical potential of tissues is reduced, radiations are depressed, so that even the narcotic may constitute the last straw for the debilitated vital organ.

Anaesthetics and narcotics are relatively safe in youth and in health. In illness and old age something must be known of the state of the protoplasm of the vital organs prior to the use of the above agents. In case of impairment, inhalation anaesthesia is to be avoided, replaced by local, splanchnic or spinal anaesthesia. "Ether and chloroform should rarely be administered to a bad risk or aged patient." If a general anaesthesia be employed nitrous-oxide oxygen or ethylene are safest, perhaps one or the other for analgesia reinforced by local, regional, splanchnic, or spinal. It is an established principle that nerve blocking is the only complete assurance against shock.

Nitrous-oxide is almost complete protection against shock. Spinal anaesthesia should not be used in trivial operations or in cases with high blood pressure. "Anaesthetics, narcotics and the well man differ entirely from anaesthetics, narcotics and the sick man."

C. H. J.

"Acute Appendicitis After Forty"

By MAAS, BOYCE and McFETRIDGE.

American Journal of Surgery, January, 1934.

Acute appendicitis still has a mortality of over 10%. Gravity of the disease in children emphasized. In the extremes of life there is more than two-thirds of the mortality, though only one-third of the incidence. In 2,229 cases, total mortality

2%; 87% were under the age of forty, with a death rate of 0.8 of 1%; of the remaining 13% the mortality was 10%.

Reviewing one hundred cases of acute appendicitis after forty from the Charity Hospital of New Orleans, the authors find an incidence of 8.5%. About 50% were operated upon within forty-eight hours of onset, twenty-seven within the first twenty-four hours, the remainder after three to thirty days' duration. In nine of the one hundred there was simple acute infection, in fourteen suppuration; of the other seventy-seven, gangrene in sixty with associated pathology. Of twenty-seven operated within twenty-four hours after onset, twenty showed massive gangrene.

The opinion is advanced that a suppurative process occurs in youth where the organ is highly lymphoid in character, whereas in older subjects, with lymphoid tissue largely disappeared, the process becomes fundamentally vascular in origin.

The onset of attacks is more likely typical in youth, contrasted with highly atypical history obtained in the present series, where the onset of symptoms is mild, with self treatment and repeated catharsis the rule. Relief is frequently experienced coincident with the advent of rupture or gangrene.

At operation gangrene occurred commonly. Adhesions were few, peritonitis, if present, diffuse and spreading. Vascular infection spreading to the mesentery was commonly noted. Massive gangrene extending to mesentery and cecum frequent. Less than half the cases had the type of disease permitting simple appendectomy, the balance requiring additional measures, such as enterostomy, which has the advantage of diminishing distention and supplying an outlet for the intestinal contents.

Anaesthesia used in 85% was spinal.

In most cases the convalescence was stormy. Complications were wound infections, bronchial pneumonia and atelectasis (1), pleurisy (1), perinephric abscess (1) and subphrenic abscess (2). The causes of death were peritonitis (11), pneumonia (3), embolism, intestinal obstruction, septicemia, uremia and cerebral hemorrhages.

In these cases of appendicitis over forty, the authors consider surgery justifiable and advisable on the basis even of *reasonable suspicion*.

C. H. J.

"Fulminating Laryngo-Tracheo-Bronchitis." Lyman Richards

Annals of Otology, Rhinology and Laryngology,
December, 1933.

To truly appreciate the worth of this article the reader must have been faced with the responsibility of caring for one, or more, of these tragic cases. As the author says, an understanding of the underlying pathology is necessary for intelligent handling. The differential diagnosis rests between foreign body, diphtheria and acute infectious laryngitis. Direct laryngoscopy is essential in arriving at the diagnosis. The condition may be defined as an acute infection of the upper respiratory tract by the streptococcus hemolyticus, with high fever and intense inflammatory changes in the mucous membranes and walls of the trachea, bronchi and bronchioles, accompanied by the formation of a sticky, gummy exudate, partially or completely occluding the upper airways. The histologic picture is comparable to that of a

cellulitis of the skin. It is usually encountered between the ages of 2 to 4. Onset is sudden, with symptoms of spasmodic croup. There is usually inspiratory stridor, hoarseness and barking cough. Laryngeal obstruction rapidly becomes more pronounced. Direct laryngeal examination will reveal obstructive crusts in the glottis. There is no bleeding on removal. The supraglottic tissues show little inflammatory reaction, as would be the case in laryngeal edema. Below the crusts, in the subglottic region, the tracheal secretion is fluid and tends to remain so until coming in contact with air in the larynx, when it becomes dried and forms the crusts.

Treatment depends upon keeping the airways open and the fluid intake of the patient at a high level, to combat the tendency of tracheal secretions to become dried out and produce further obstruction. Crusts should be removed from the larynx and trachea with forceps, or suction. Intubation may be done. Most cases, however, will require tracheotomy. When indicated it should be done early. These cases will stand no temporizing. Tracheotomy itself is not sufficient, since it only assures relief of laryngeal obstruction, and, with this condition, the obstruction is lower down, at the bifurcation and in the primary bronchi. Bronchoscopy, with mechanical removal of the obstructing crusts, is necessary. This will have to be repeated as often as obstructive signs appear, as an emergency measure without delay. This is facilitated by the tracheotomy, as the bronchoscope may be rapidly inserted through the tracheotomic fistula with less distress to the patient. The prognosis is very poor. Most cases die within a few days, due to the rapid spread downward of the disease. In those cases which have survived, it has been necessary to do numerous bronchoscopies, at all times, almost at a moment's notice. Fluids have been provided by mouth, intravenous injections and by hypodermoclysis. Sodium bicarbonate, instilled into the tracheal cannula, seems to soften the secretions and facilitate aspiration by suction. Antistreptococcus serum has been tried, but due to the difficulty in matching the particular strain of organism in a given case, up to the present, has been disappointing.

F. T. H.

"Etiology and Nature of Chronic Hyperplastic Sinusitis"

Grove and Cooke

Archives of Otolaryngology, November, 1933

The authors find sinus hyperplasias associated with some form of allergy. They differentiate between those which are skin-sensitive, those which are of the bacterial, or infective type, and those showing a combination of both. They believe that infection is the true cause of the hyperplasia and that the reaction to the bacteria is allergic on account of the constitutional tendency of the patient. This is contrary to the theories of Hansel, Piness, Dean and others. Eighty cases were carefully studied. In over 85% of the specimens, organisms were definitely demonstrated. Cases of true cutaneous sensitivity, without infection, did not show hyperplastic changes. 40% of patients with hyperplasia showed no cutaneous reactions. In the 60% that showed positive reactions, specific treatment had no appreciable effect on the hyperplasia. They were able to cause a local reaction in the sinus membranes by subcutaneous injections of autogenous vaccine. This is a most interesting observation and would seem to point

to the sinus being the cause and not the result. The field of bacterial allergy offers much ground for speculation. These findings seem to confirm the observations of many of us, that the best results were obtained in the cases which had radical surgery as well as specific treatment.

F. T. H.

"Suppuration of the Temporal Bone Accompanied by Infection in the Blood Stream" Lillie

Archives of Otolaryngology, November, 1933

This is a clinical study based upon a series of fifty-two cases, representing definite sinus phlebitis, mural thrombosis, obliterating thrombosis of the lateral sinus, or thrombosis of the jugular vein. The discussion is largely limited to the operative procedures undertaken and the effect of these measures. The mortality rate for this series was 13.4%. The author concludes that the surgical procedures should be adapted to the patient in each individual case, and that obliteration of the sigmoid sinus and ligation of the jugular vein are not indicated in all cases, although when in doubt it is safer to tie the vein. Blood transfusions are of great value as a supportive measure, but do not supplant surgical removal of the infecting focus. While operations for relief of blood stream invasion need not always be considered as emergencies, nevertheless this condition does not call for expectant treatment.

F. T. H.

"Diagnosis and Treatment of Primary Malignant Neoplasms of the Maxillary Sinus" Houser

Archives of Otolaryngology, November, 1933

In this paper, based upon a series of twenty-one cases, the author concludes that surgical procedures should have as their major purpose exposure of the lesion so that direct irradiation may be used. Röntgen and radium therapy in adequate dosage offer the best prognosis. Early diagnosis is necessary for the best results, and if a neoplasm is suspected the sinus should be explored and a biopsy done.

F. T. H.

"The Place of Iodine in the Treatment of Goitre"

By HOWARD M. CLUTE, M. D., and LEWIS S. PILCHER, II, M. D.

The New England Journal of Medicine, Vol. 210, No. 3, Jan. 18, 1934.

The authors have found, from a study of the records of the Lahey Clinic, that the administration of iodine in real and suspected goitre previous to entry has not decreased, and points out the value and dangers of iodine medication. The value of iodine is in preventing endemic goitre in regions where there is a low iodine content in the food and water, and in preparing toxic goitre patients for operation. Iodine will not cure hyperthyroidism, and toxic cases which have had long-continued preliminary treatment are poorer operative risks than cases that have had the usual pre-operative régime. In malignant and pre-malignant cases much valuable time is lost previous to operation by its administration.

J. R. H.

"The Cause of Death of Patients with Organic Heart Disease Subjected to Surgical Operation"

By W. K. PURKS, M. D., Boston, Mass.

Annals of Internal Medicine, Vol. 7, No. 7, Jan., 1934.

A group of sixty deaths in cardiac patients subjected to operation reported by Butler, Feeney and Levine in 1930 among 414 cases with organic heart is compared to sixty deaths in approximately 1,600 operations on non-cardiacs. The study revealed that congestive failure in the well-treated cardiac was not a significant factor in the cause of death. The cardiac patient in a ratio of about four to one seems more liable to preliminary infection than the non-cardiac. Pulmonary embolism and coronary occlusion increase the risk in the cardiac patients.

J. R. H.

"A Consideration of Four Eras in Medicine as a Basis for a Prophecy"

By WILLARD BARTLETT, A. B., A. M., M. D., D. Sc.,
F. A. C. S.

Kentucky Medical Journal, October, 1933

This was an annual oration delivered before the Kentucky State Medical Association. It is delightful reading and is evidence of extensive historic research on the part of the author. Dr. Bartlett divided the development of medicine into four distinct parts, or eras.

First, the Era of Anatomy. In this section he traces advancement from the days of Leonardo da Vinci to modern times. 1452, he gives as the date of the birth of the science of anatomy. High lights in the progress of each country are mentioned, as well as some of the outstanding difficulties encountered.

Second, the Era of Chemistry. Anesthesia is credited with being the crowning triumph of chemistry. This era is covered by a summary of the discovery and application of various forms of anesthetics.

Third, the Era of Pathology. Here are presented some of the well-known names associated with pathology, as well as some which are unusual, such as Goethe and his work on plant morphology. The relationship of pathology to surgery is clearly demonstrated, also the importance of the microscope and the practice of asepsis.

Fourth, the Era of Physiology, in which is listed a group of eight contributions of general physiological character, with their relationship to general advancement of medical science.

This oration covers concisely and extremely well many years of advancement of the medical science, through its struggles and achievements, and ends with a plea that the physician cultivate an individual interest in each patient.

J. G.

"Post-Mortem Examinations"

By WILLIAM J. HOFFMAN, M. D.

Journal of the A. M. A., Vol. 101, No. 16,
October, 1933

Dr. Hoffman opens his article by stressing the accepted importance of autopsies. He then goes on to the difficulties encountered by the physician in securing the permission for a post-mortem

examination. The doctor making the request is in a favorable psychologic position, and the degree in which he has developed the confidence of the patient's relatives is a vital factor toward the likelihood of an autopsy being secured should death intervene.

Dr. Hoffman lists and discusses the prevalent reasons for failure in securing autopsy permissions as follows:

1. Divided responsibility.
2. Delay.
3. Poor technic.
4. Indecision.
5. Professional objections.
6. Personality conflicts.
7. Religious objections.
8. Miscellaneous.

He goes on to make some excellent suggestions as to methods of approach, counter arguments, and procedure, as well as the difficulties encountered in regard to religious prejudice.

The article is concluded with two charts, comparing autopsy records at the Memorial Hospital for 1932, which clearly demonstrate that the problem of securing post-mortem examinations can be met successfully.

Three abstracts follow the article, offering general confirmation and suggestions for this problem.

J. G.

"Divided Doses of Typhoid Vaccine in the Fever Therapy of Neurosyphilis"

By J. R. DRIVER, M. D., and HENRY C. SHAW, M. D.,
Cleveland, Ohio,

Journal of the A. M. A., December 23, 1933.

The technic is to use a fresh commercial vaccine containing 1,000,000,000 organisms per c.c.; to 1 c.c. of the vaccine 9 c.c. of physiological salt solution is added. Injections are preferably given with a tuberculin syringe for accuracy. Treatment is given on alternate days, but may be given on successive days if the temperature has returned to normal. The first dose is of a size calculated to cause slight fever and the second is given during the height of the fever produced by the first. The temperature is taken rectally every half hour until it reaches 104° Fahrenheit and then every fifteen minutes until it returns to 104° Fahrenheit. Thereafter it is taken every hour until normal.

The first dose is given at any convenient time. The patient usually experiences a chill within thirty minutes to two hours, the chill lasting for a few minutes, and followed by a rise in temperature. The second dose is then given after the rise is well established, 100° Fahrenheit or higher. The interval between the doses should be not less than two hours. An interval of from three to six hours is usually satisfactory. A course of treatment may consist of any number of reactions.

It should be remembered that there is a great individualism in the tolerance of patients to the injection of foreign proteins, and although it is believed that this factor is less marked with the divided dose method of using the vaccine, yet careful attention and bedside study are perhaps required in greater measure than in most therapeutic procedures.

NOTE:—This procedure is indicated in other conditions than neurosyphilis where a foreign protein is indicated, such as ulcers of cornea, chronic neuritis and arthritis and multiple sclerosis.

L. H. S.



The President's Page

TO THE MEMBERS OF THE MAINE MEDICAL ASSOCIATION :

Two special announcements have gone forward, by mail, to the members of the Association.

It was very gratifying to your President to send the announcement and the tentative program for the clinical meeting of the Association which will be held at Bangor the 20th and 21st of this month. This program is a gift from the staff of the Eastern Maine General Hospital to the Association. These good men are sparing no labor to make this meeting a success. Many of our sister state associations have begun the practice of holding a distinctly clinical session, apart from the annual meeting. These meetings have proven their real worth and demonstrate beyond a doubt that the rank and file of physicians in this country appreciate the opportunity of broadening their medical acquaintance and horizon by attending clinical sessions. They have an opportunity of seeing how the other fellow does his work, the better checking, thereby, their own work. It is hoped that every member of the Association, who can possibly do so, will show his appreciation of the Bangor group by attending this meeting. Let's go and show those fellows that we appreciate their unselfish work for the members of the Association.

The other special communication was in relation to physicians' liability insurance. The Medical Advisory Committee, the attorney for the Association and the Council, after careful investigation, decided that it was wise to recommend that the physicians place their liability insurance with the Commercial Casualty Company. Their rates are reasonable. They guarantee them for three years. They have met all the other requirements of the Medical Advisory Committee and Council of the Association.

The work of the Association, co-operating with the State Department of Health, has been progressing very well indeed, considering the unusual winter which we are having. In some localities the members have confused this undertaking with the E. R. A. agreement. This is a separate and distinct enterprise which will reflect great credit on organized medicine in Maine when completed. The Council of the Association pledged the support of the Association to this enterprise. It is hoped that all members will co-operate when the agent or agents of the Department of Health enter their community to organize the group of lay helpers. The examinations can be easily and quickly accomplished with the expenditure of a nominal amount of time and energy.

The Scientific Committee of the Association invited the President of the Association to be present at their last meeting and go over the program for the annual meeting. The program is the same as completed and is a fine piece of work, complimentary to the Association and reflecting credit to the members of that committee. The individual members of that committee cannot be complimented too highly for the energy and time that they have devoted to this piece of work.

The President of your Association is gratified to have received many letters and telephone calls expressing approval of the way the liquor bill before the legislature and the correspondence about it was handled by the Officers and Council of the Association.

Again, on to Bangor February 20th and 21st.

W. E. KERSHNER.

Necrology

Harris James Milliken, Bangor, 1878-1933



One member to fall from our ranks was Harris James Milliken, of Bangor, who died Saturday, October 4, 1933, of myocarditis and nephritis, at the age of 55.

He was the son of James and Ida M. Milliken, born in Bangor, December 5, 1878. He was one of the most promising youths in Bangor during his time in the public schools. After obtaining distinguished grades in Bangor High School and Bowdoin, he was medically educated and graduated from Bowdoin Medical School in 1904.

He was immediately appointed an interne at the Eastern Maine General Hospital in Bangor, and later became chief of the surgical staff of that institution.

He was very clever as a surgical operator, wrote his share of medical and surgical

papers for the state medical society, and left many marks of his admirable career in medicine and surgery.

J. A. S.

Bertrand D. Ridlon, Gorham, 1869-1933

Dr. Ridlon, once a surgeon at the National Soldiers' Home at Togus, and during the late war connected with base hospitals in the South, died at his home in Gorham, December 9th, as the result of an attack of heart disease which he suffered the previous Friday.

Dr. Ridlon was born at Kezar Falls in 1869, the son of Emery S. Ridlon, who was at one time an attorney in Portland. Young Ridlon attended the Portland schools and graduated from Bowdoin Medical School in 1891. He went to Togus as assistant surgeon, where he stayed until 1915, when he moved to Portland.

As a member of the Army Medical Corps in the war, he was stationed at base hospitals at Fort Benjamin Harrison, Camp Gordon, and Camp Joseph E. Johnston. He had organized and taken command of a base hospital unit for service overseas when the war ended.

Later Dr. Ridlon was stationed at Fort Williams, Portland, and in 1919 he received his discharge with the rank of major. The following year he was appointed a surgeon in the army with the rank of major. When he returned to private practice, eleven years ago, he settled in Gorham.

Dr. Ridlon is survived by his wife, Mrs. Harriet Loughhead Ridlon, a daughter, Miss Margaret, and his mother, Mrs. Ida Bickford Ridlon.

J. A. S.

Arthur Jewett Lougee, Fryeburg, 1870-1933

Dr. Lougee, the son of a well-known practitioner in medicine, Dr. Isaac and Ellen Wheeler Lougee, his wife, of Rochester, New Hampshire, died at the home of his brother, Dr. William W. Lougee, in Malden, Mass., on December 21st.

He was born in Rochester, N. H., November 1, 1870, and was educated in the public schools of that town and graduated from Dartmouth in 1893, receiving the additional degree of M. A. the following year there. His medical training was taken at the College of Physicians and Surgeons, New York City. In 1903 he came to Fryeburg, where he has been in active practice ever since, combining eye work with his general practice. During the winters spent in St. Petersburg he has also practiced medicine.

In 1906 Dr. Lougee married Lucia Morrill, of Conway, N. H., who survives him.

The funeral was held at his home in Fryeburg on December 24th, interment taking place at Conway Center, N. H.

Dr. Lougee kept in active and alert contact with all that was new and interesting in his profession. He will be missed by a wide circle of friends.

J. A. S.

County News and Notes

Aroostook

In Memoriam

EDWIN CASSIUS BATES, M. D., 1882-1933

It is with the deepest regret that the Aroostook County Medical Society records the passing of one of its most beloved members, Edwin C. Bates, on September 23, 1933.

Edwin Bates was born in Saint Stephen, N. B., on December 19, 1882, the son of David Hume and Frances A. Bates. After preliminary schooling in his native town, he attended Coburn Classical Institute, from whence he matriculated to Bowdoin College in the class of 1904. In 1908 he was graduated from the College of Physicians and Surgeons of Columbia University, and after a period of hospital training began the practice of his profession in Houlton, where he has since resided.

Early in his professional career he married Miss Grace Dienstadt, of Saint Stephens, who died in 1920. Two years later he married Miss Louise Harrison, of Houlton, who survives him.

Amongst his colleagues the Doctor was held in high esteem and at one time was president of the Aroostook County Medical Society. He truly exemplified the highest type of practitioner—one giving wise and timely medical counsel tempered with humane judgment and a thought to the family problem.

On September 23, 1933, after a strenuous morning of hospital work and medical calls, he passed away while seated at his desk. He died as he had lived—giving service.

Besides his various medical connections he was a member of the Delta Kappa Epsilon Academic fraternity and the Monument Lodge of Free and Accepted Masons.

The Aroostook County Medical Society desires to place on its records its appreciation of a member who, by his sterling character, medical proficiency and general good fellowship, has set a worthy example for us all. We extend to the widow of Doctor Edwin Bates and to his innumerable friends our deepest sympathy.

WILLIAM B. GIBSON,

E. H. DOBLE,

ARTHUR T. WHITNEY,

Committee on Resolutions,

Aroostook County Medical Society.

Cumberland

Portland Medical Club

The regular monthly meeting of the Portland Medical Club was held at the Columbia Hotel, on Tuesday evening, January 2nd, at 8.00 P. M. Dr. E. H. Drake was the speaker and gave an instruc-

Your necrologist is obliged to apologize for several belated notices on the deaths of members of the profession, during the past few months, due to a slight indisposition.

tive and interesting paper on "Paroxysmal Tachycardia." He showed some electrocardiograms and brought forth their value in this study.

Alice Whittier, M. D., *Secretary*.

Hancock

At the annual meeting of the Hancock County Medical Society, held on Wednesday, December 13th, at the Hancock House, Ellsworth, the following officers were elected for the year 1934:

President, Dr. G. A. Neal, Southwest Harbor.

Vice-President, Dr. R. W. Clarke, Ellsworth.

Secretary-Treasurer, Dr. R. E. Weymouth, Bar Harbor.

Delegate, Dr. J. D. Phillips, Southwest Harbor; Alternate, Dr. A. H. Parcher, Ellsworth.

Councilors, Dr. R. G. Higgins, Bar Harbor, term of three years; Dr. R. V. N. Bliss, Bluehill, term of two years; Dr. C. C. Knowlton, Ellsworth, term of one year.

Dr. Geo. Parcher, of Ellsworth, was elected a member of this County Society.

Dr. Geo. Parcher was made chairman of the county team for the Federal Child Health Recovery Program.

A paper was read by Dr. Pressey, of Bangor, on "Common Skin Affections," and Dr. Knowlton, of Bangor, talked on "The Use of Insulin in Malnutrition in Non-Diabetics."

Supper was served at 10.00 o'clock.

There were seventeen present at the meeting.

G. A. NEAL, *Secretary*.

Kennebec

The meeting of the Kennebec County Medical Association was held at the Elmwood Hotel, Thursday afternoon and evening, January 18, 1934.

The meeting was called to order at 4.30 P. M. The minutes of the last meeting were read and approved. This was followed by a Clinical Program, which was presided over by Dr. George W. Alexander, President, Gardiner, Maine, with the following program:

Dr. E. W. Boyer, Waterville, Sarcoma of Ankle.

Dr. L. A. Guite, Waterville, Sarcoma of Leg, Carcinoma of Fundus.

Dr. F. T. Hill, Waterville, Adenocarcinoma of Antrum, Carcinoma of Larynx.

Dr. T. C. McCoy, Waterville, Carcinoma of Cheek—two cases.

Dr. A. H. McQuillan, Waterville, Endothelioma of Forearm.

Dr. R. L. Reynolds, Waterville, Complete Proctodentia, with Carcinoma of Cervix.

Dr. J. O. Piper, Waterville, Carcinoma of Splenic Flexure of Colon.

Dr. E. H. Risley, Waterville, Carcinoma of Transverse Colon—five cases.

6.30 Dinner was served at the hotel.

The meeting was again called to order at 7.30, followed by a short business meeting.

The resignation of Dr. C. G. Rancourt, of Waterville, was read, and it was voted that his name be placed on the records as an honorary member of this society.

It was voted that the Secretary send a classified list of all the members of this association in good standing to John McDonough, at the State House at Augusta, as willing to do the medical work for the C. W. A.

Dr. W. E. Kershner, of Bath, President of the Maine Medical Association, spoke briefly relative to the malpractice insurance, also on the work of the C. W. A.

Scientific Program, when the following papers were read:

"Review of Cancer Work at Augusta General Hospital," for 2-year period, V. T. Lathbury, M. D., Augusta.

"Review of Cancer Work at Gardiner General Hospital," for 2-year period, C. G. Farrell, M. D., Gardiner.

"Review of Cancer Work at Sisters' Hospital," for 2-year period, L. A. Guite, M. D., Waterville.

"Review of Cancer Work at Thayer Hospital," for 2-year period, A. H. McQuillan, M. D., Waterville.

"Analysis and Summary of Group Results," E. H. Risley, M. D., Waterville.

These papers were very carefully prepared and gave a great deal of valuable information.

There were twenty-six members present.

Respectfully submitted,

FREDERICK R. CARTER, M. D.,

Secretary-Treasurer.

A Diagnostic Cancer Clinic has been established at the Thayer Hospital in Waterville. This will be held each Thursday morning between 10.00 and 12.00 o'clock. Physicians desirous of referring cases for diagnosis are requested to send a letter with the patient, giving the history, if they do not accompany the patient themselves. A nominal fee to cover expenses of X-ray and laboratory work only will be charged. No treatment of any kind or biopsy will be done unless requested by the referring physician. A report of the findings will be sent to the physician upon completion of the study.

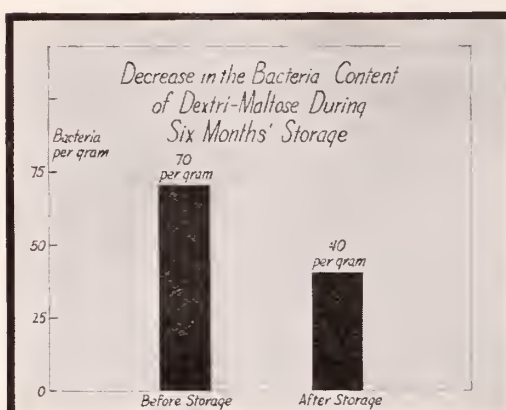
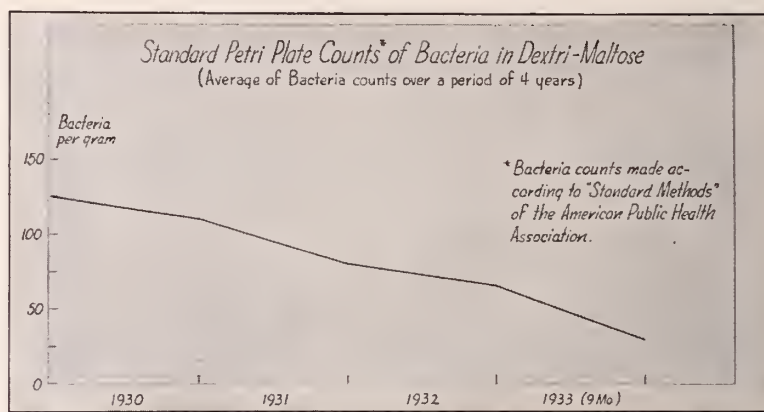
York

The regular annual meeting of the York County Medical Society was held January 10th, at the Tavern, Kennebunk, Maine. Dinner was at 1.00 o'clock and the meeting at 2.00. Papers were read

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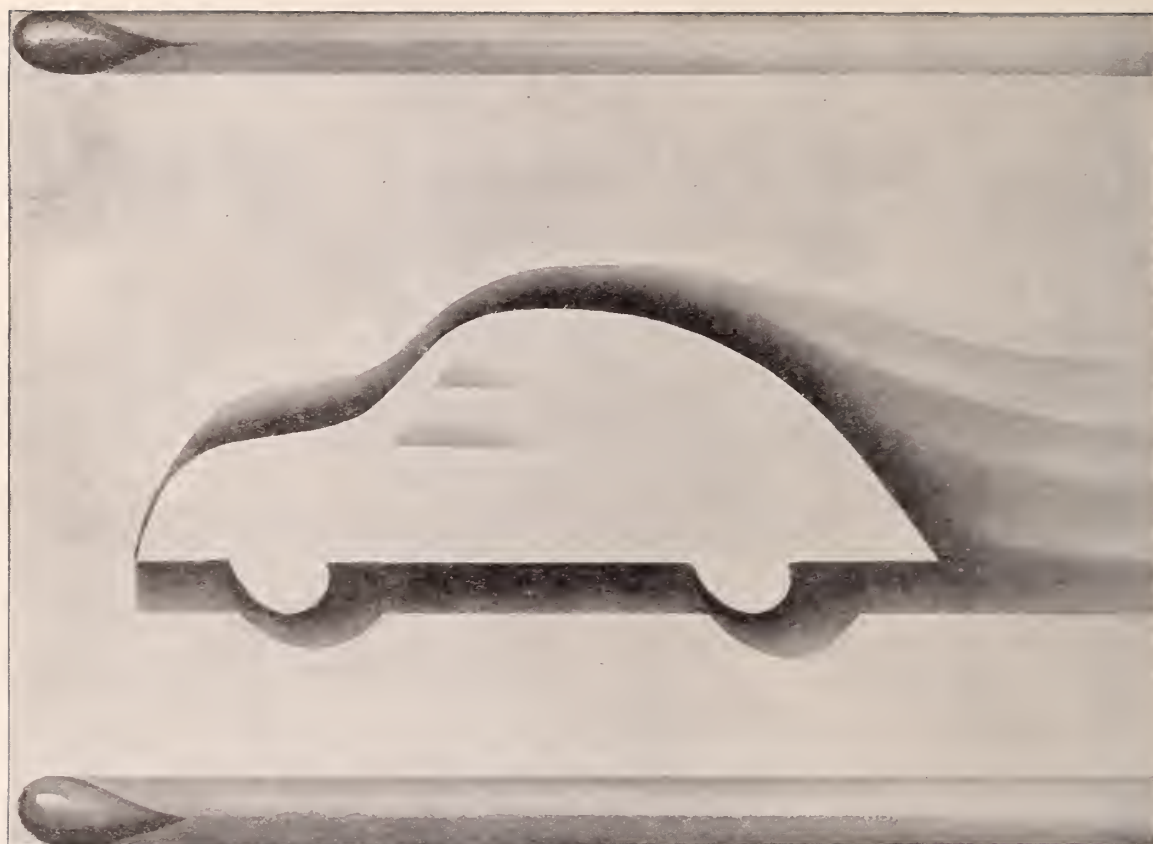
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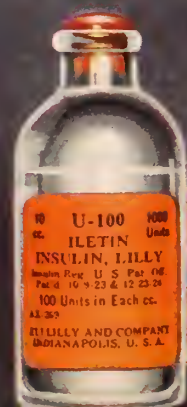
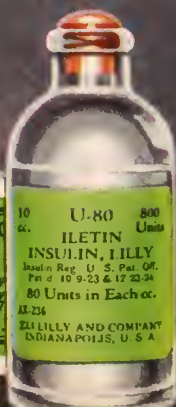
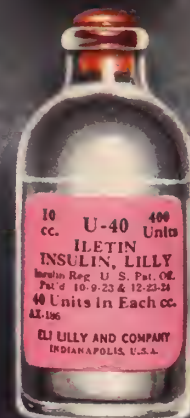
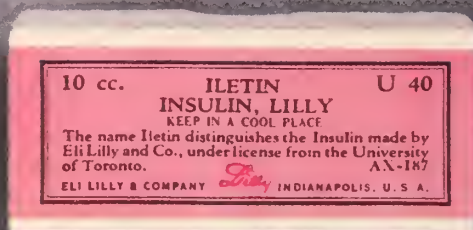
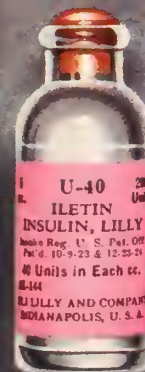
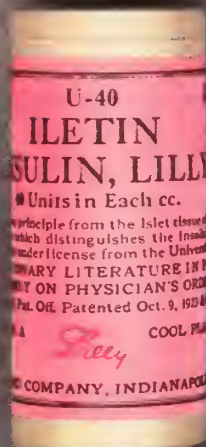
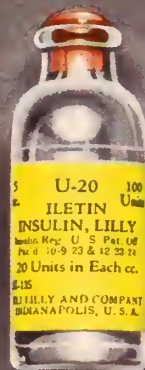
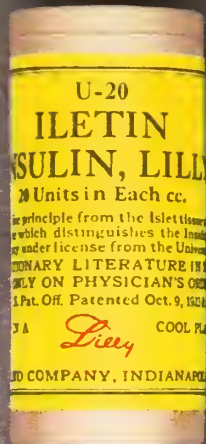
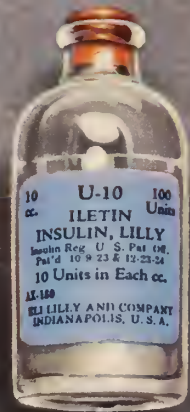
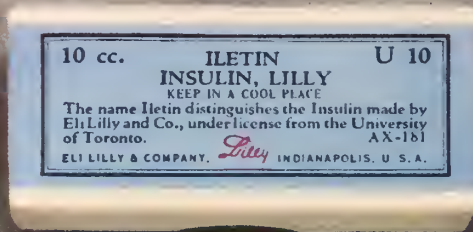
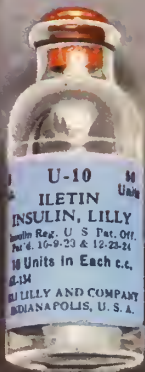
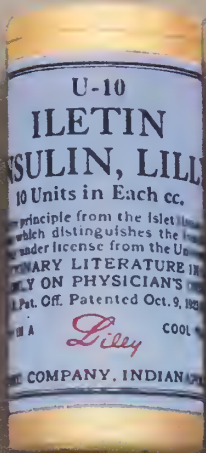
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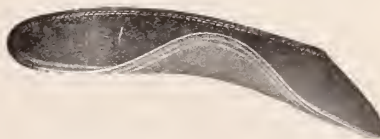
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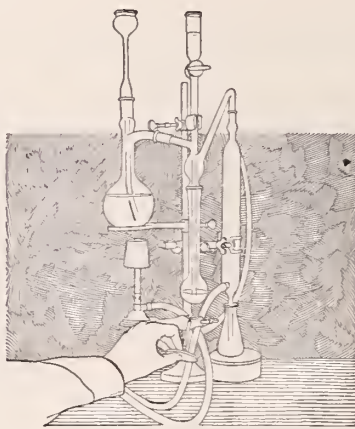
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Maine Medical Journal

The Official Organ of
The State and County Medical Societies

Vol. XXV

Portland, Maine, March, 1934

No. 3

Editorials

The Bangor Clinical Session

The time of year was unpropitious, and on the first day Maine was visited by the worst storm of the season, yet, despite these handicaps, the two-day clinical session provided by the staff of the Eastern Maine General Hospital for members of the Maine Medical Association was a conspicuous success. Credit is due alike to those who conceived the plan and to those who executed it.

Once more has Maine demonstrated that she not only possesses adequate clinical facilities for the study and treatment of disease, but that she numbers among her doctors, men of outstanding ability in their profession, men so skilled in diagnosis and treatment as to make it quite unnecessary for Maine citizens to seek medical and surgical counsel in more remote centers.

On behalf of those doctors who were able to avail themselves of the excellent clinical instruction provided and of the spirit of camaraderie which prevailed, the JOURNAL wishes to express sincere thanks. It also ventures the hope that a similar meeting may be held each year as part of our State Association's activities, especially if our annual sessions are to be held in non-clinical centers.

E. W. G.

Bangor's Viewpoint of the Recent Clinical Session

The session, from the viewpoint of those who were responsible for it, was both an inspiration and a disappointment.

It was an inspiration, in that every man who was approached was willing to take hold and do his best to make the clinic a success. It seemed best, in view of the fact that it was somewhat of an innovation, to have the clinic put on by the members of the Eastern Maine General staff, for several reasons. First, because the idea was something new and needed considerable planning to work it to advantage, and the staff is a closely associated group that is together frequently. Second, cases, case records, X-ray findings, etc., were perhaps more easily available for this group.

However, it is the aim and desire of the State Association to broaden this work so that every member who wishes to present a subject, or can be in any way persuaded to present one, shall do so. There are many men in the Penobscot Society who are eminently capable and fitted to present subjects, and whom we hope to hear from in future clinics.

It was somewhat of a disappointment that, due to weather conditions, the time of year, business reasons, and various other causes,

there was not a larger attendance. True, we had a severe blizzard, but it would seem that more of the men from the immediate vicinity might have made more of an effort to attend. However, "Many a mickle makes a muckle," and we hope that the enthusiasm will grow, and that before long this worth-while activity will be something very real and valuable, both to the society and to the individual man.

J. L. JOHNSON, M. D.,
Councilor for the Sixth District.

Burden or Privilege?

Scientific medical progress in five decades has outstripped that of previous ages. Such a record may be viewed with pardonable pride. What of the attitude of the general public toward the profession from whose ranks and by whose forefathers and contemporaries such progress, with its manifest boons to mankind, has been derived? Much lip praise to be sure, no little hero worship here and there, some romantic reference to the glorious old general practitioner whose passing they deplore, and perhaps a well-filled church at the end.

The physician primarily conscious of his responsibility strains every resource to prepare himself to serve some public. Valiantly and confidently he sets out to relieve his stricken people; proud of his responsibility, zealous to serve, eager to cure, careless at the outset of the recompense his family and himself presumably deserve. The well-to-do, the provident, the conscientious citizen pays his doctor's fee. A large group cannot or will not pay at all and become the individual charity of the harried physician.

Why in God's name does this condition exist save by the force of inertia? Where is its justice—its justice either to the individual physician or to the considerable group of patients who pay perhaps too dearly, though not enough to cover the cost of caring for the indigent or shiftless many? What of prenatal care, obstetrical care, the treatment of venereal disease in those unable to pay? All are types of cases the general public would deplore to see neglected and rightly so. The laity would cruelly and harshly judge the

profession for its neglect of all these, yet it gladly enough accepts the physician's gratuitous contributions of his own time and skill in such cases and multifarious others.

Does the medical profession assume such individual charity by choice or is it thus victimized? Does it choose to continue *ad infinitum*? Is it departing from proper conceptions of medical ethics and the ideals of humanitarian service to expect and demand and receive fair recompense for every skillful service rendered rather than possibly imposing upon the generosity of some and submitting to the impositions of many others?

The practical application of such principles would offer obstacles not insurmountable. Careful planning would be necessitated. The local administration of a fund for local purposes would be preferable by town or county units. The stigma of charity or paternalism should not exist. The detailed technique of a plan to relieve the physician of his individual burden of private charity would be worked out if interest and coöperation of the profession were manifest.

These remarks are submitted without bitterness and with deep sincerity for consideration by the physicians of Maine.

C. H. J.

The Annual Meeting

The annual meeting of the Maine Medical Association will be held in Bangor, May 28th and 29th. Headquarters will be at the Bangor House, where most of the meetings will be held, with the exception of the general sessions Monday and Tuesday afternoons, which will be in Memorial Hall, just across the street. The program promises to be exceptionally interesting, while the well-known hospitality of the Bangor men should be sufficient guarantee of a most pleasant meeting.

Dr. Dean Lewis, President of the American Medical Association, and Professor of Surgery at Johns Hopkins University, will be the guest of the Association, and the principal speaker. He will speak on Tuesday afternoon, taking for his subject, "The Differential Diagnosis of Breast Tumors." It will be an exceptional opportunity for our

members to hear Dr. Lewis, who is one of the foremost authorities in the country. A luncheon for all graduates of Johns Hopkins will be held on Tuesday noon, at which time they will have an opportunity of meeting and renewing acquaintance with Dr. Lewis. The arrangements for this luncheon are in the hands of Dr. T. S. Moise, of Bangor, and all Johns Hopkins men, if they have not been notified, are requested to get in touch with Dr. Moise.

There will be a Secretaries' luncheon Monday noon, at which time all County Secretaries are to meet with the President-Elect, Dr. E. W. Gehring. At this time, Dr. Gehring will take up his contemplated program for the ensuing year. It is very important that all Secretaries be present. On Tuesday noon there will be a luncheon table for all ex-Presidents of the Association.

The meeting will open on Sunday evening, May 27th, at which time the first session of the House of Delegates will be held. On Monday and Tuesday mornings there will be the group conferences. These will be held in small rooms in the Bangor House. The completed program for these conferences will be published in the April number of the JOURNAL. Members are requested to apply for desired conferences as early as possible after this list has been made public.

The Scientific Sessions Monday and Tuesday afternoons should prove both interesting and instructive, as a very fine program of

papers has been arranged for. Each session will be limited to four papers, so that the meetings will not be unduly prolonged.

Monday evening is in charge of the Bangor men. It is intimated that they will arrange a most interesting and novel form of entertainment. The details of this are not at present available. Suffice it to say that this will probably be a stag party, with the ladies taken care of that evening at a theatre party. Incidentally, the local committee of ladies are making elaborate preparation to entertain the wives of attending physicians. The banquet Tuesday evening will close the session. Dr. Dean Lewis will again speak at the banquet. Our President, Dr. W. E. Kershner, promises to keep the meetings moving at a swift pace, and those who know him realize that there will be no drag in the proceedings.

Reservations will be handled by the management of the Bangor House. They have given the Association very attractive rates—room with running water, \$4.50 a day; room with bath, \$5.00 a day. These rates are American plan, including meals. As their accommodations are somewhat limited, members are requested to make their reservations as soon as possible, by writing the Bangor House, attention Mr. Horace Chapman. The Bangor House will also book reservations in the other Bangor hotels.

F. T. H.

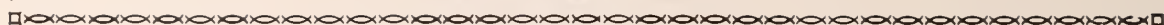
Editorial Note

The JOURNAL wishes to call your attention to the removal of Marks Printing House from 97 Exchange Street to the corner of Pearl and Middle Streets, Portland.

On December 22nd, our printers were burned out, but our January and February issues of the JOURNAL were printed *on time* under great limitations and cumbersome circumstances, true to the publishers' traditional code.

Again, we take an opportunity to remind

our contributors that reprints of articles should be ordered before the JOURNAL is mailed out. The printer does not hold your paper set up in type after the JOURNAL is published, and, as some authors learn to their surprise and expense, it is impracticable to have an article reset to obtain reprints. Order your reprints when you return your approved galley proof, either through the JOURNAL office or direct from Marks Printing House.



Haliver Oil

By JAMES A. SPALDING, M. D., Portland, Maine

When I was a boy in Portsmouth, N. H., some eighty years ago, my father, who was a sea captain, owned a sailboat, and in it he used to take us, his three sons, down the river at Portsmouth, and we would sail to Boon Island Light or to Rye Beach, Hampton, or way out to the Shoals.

We always went with our fishing lines and worms for bait, dug up in the garden. We would catch anything from cunners to cod, mackerel and other kinds of fish, but we never had any luck at catching a halibut.

Once upon a time—I never shall forget it for the incident which followed it—we were hailed off the Fishing Islands and White Island Light of Portsmouth harbor by a fisherman in a big schooner, who wanted to get some of our bait cut up from fish we had caught, and in return they held up to us some nice freshly caught halibut livers, which they had picked up off the Isle of Shoals.

Father said, "Oh, do let's have them," as he handed over a dish of cut fish for bait. "We'll take them home and your mother will give you the treat of your lives."

We sailed home safely with our catch and dressed the livers properly and took them up into the dining room, our kitchen then being a basement room.

Now it happened at that time that we had as a lodger and boarder in our house, in the spare chamber, our Uncle James Parrot, who was all the time talking about new kinds of food. He made mother at one time buy the new kind of Graham flour, and make it into big loaves for him. We liked it well enough, but liked the white bread better.

Now, when he saw the halibut livers he screamed with joy, as you might say, and told mother she must fry them for dinner. On the next day mother started in on the job, and handed in to the dinner table at the noon hour a great big platter of fried halibut livers. We knew nothing of their effect on the human stomach if eaten too freely, so we piled in, so to speak, and ate until we were full. We smacked our lips, wiped our faces, walked off to some sports for the afternoon, came home and went to bed, for we did not feel very well, and, as I remember, two of us crawled into one bed and the third into a trundle bed and was rolled under a little way. Before long there was weeping and wailing, and gnashing of teeth, with nausea and its dire consequences.

Somehow or other, we managed to get through the night, but there was more sorrow in store for us, for that night was the night before the "Fourth," and when the crackers began to explode and the bells to ring and the neighboring boys to call from our yard to us, it was a terrible awakening from the chase of those halibut livers.

By the middle of the afternoon of the "Fourth" we were a bit recovered, and were driven over by "Pa" in the park to see the fireworks, but their brilliancy and the music of the bands could not make us forget our twenty-four hours' experience with halibut livers.

What wonder, then, that after all these years I long to tell you, and for the first time in my life I want to print this celebrated account of my experience with halibut livers.

**Carcinoma of the Prostate Gland*

By CLINTON N. PETERS, A. B., M. D., F. A. C. S., Attending Urologist, Maine General Hospital, Portland, Maine

One of the most common questions put to me during my identification with urological surgery, and one which I have most constantly and consistently guessed at is, "Just what percentage of prostatic obstruction cases do you find to prove malignant?"

Previously our system of records, our pathological reports, and our individual efforts in tabulation, have been such that guess-work has entered largely into this important phase of our local work, but at present, with the advent of accuracy and system inferior to few, and with the work grouped consistently about our urological staff—there being only two exceptions in the Maine General Hospital in the last five years—the requirements for a definite answer to this question are only a sufficient series of consecutive cases.

Prostatic carcinoma, from a histological point of view, is of one type, the adenocarcinoma; and while different authors group the cases in several classes, for the purposes of this paper, I will dismiss this subject with Young's conclusion, that "all the group types of carcinomatous growth in the prostate are closely related, usually appear together, and, therefore, must be considered as manifestations of a single kind of cancer."

The most common age for its appearance is between 60 and 70 years, fully 50% of all cases occurring in this decade. That the condition may be present without symptoms for a comparatively long period is fully recognized by the fact that in certain cases the disease has been picked up by metastatic growths shown in X-ray plates taken for conditions remote from the urinary tract.

However, the predominating symptoms are associated with this tract, and are caused by the interference of the growth with the evacuation of the urinary bladder, either by direct obstruction with a certain amount of residual urine, or by irritation and pressure, causing frequency.

Contrary to the general idea, too frequently accepted by medical advisers, hema-

turia is the exception rather than the rule; and I wish to greatly emphasize this fact, as in my own practice I have seen one case that was allowed to become so depleted from loss of blood that a needless fatality ensued, due solely to the fallacious idea that the patient was suffering from malignancy, when the gland was a large adenoma, a type much more prone to hemorrhage than the hard carcinoma.

Pain is a varying symptom and occurs in a large percentage of cases. It is rarely diagnostic, and while the metastatic growths are sometimes a factor in producing this symptom, its distribution is so erratic that little value can be placed upon its presence or absence in distinguishing malignancy of this gland. The one exception, according to Keyes, is a bilateral sciatica in old men, which he considers pathognomonic.

As long as urinary drainage is properly maintained, there is nothing in the appearance or symptoms of the patient to bring the attention of the surgeon, or even the patient himself, to suspect any trouble with this gland. The tumor is usually slow growing, and the toxemia found with other malignancies is apt to be absent entirely until the later stages of the disease.

Where urinary drainage is early interfered with, this is not the case, and the cardinal symptoms of prostatic obstruction, with its train of manifestations due to urinary back pressure, residual urine, plus infection, greatly overshadow whatever mild toxemia the cancer may produce.

Previously, malignant and benign obstructions have been considered two distinct pathological entities, and to my mind, in the large majority of cases, exist as such. That they may exist in conjunction has been proven beyond all doubt by recent studies, and small areas of malignancy have been shown to exist in the stroma of hypertrophied lobes. That such conditions co-existing are rare, I feel is true from my personal observation; for in twenty years' association with prostatic sur-

gery, I recall but three cases where malignancy was not suspected pre-operatively that the pathological report was positive.

For further consideration in this paper, then, I shall disregard this small minority, and hold that the average carcinoma starts in the posterior lobe of the gland and infiltrates slowly until definite obstruction sends the patient to his medical adviser for relief. Rectal examination of these cases discloses a prostate, usually not of great size, *but firmly fixed and immobile*. Dependent on the type of growth, it may be smooth and hard and best described as "rock-like" on pressure, with such a characteristic density that to a man trained in prostatic examination, the diagnosis leaves little doubt. Equally common we get the hard gland, *also firmly fixed*, which presents the nodular surface which the average examiner associates with carcinoma. These two groups account for fully 80% of our prostatic malignancies, the other 20% being distributed among the isolated malignancies associated with frank hypertrophies, and glands presenting large degenerative cystic areas very difficult to differentiate from large soft adenomas. All of these types, except those presenting early isolated malignant areas in the center of hypertrophied lobes, are capable of diagnosis at the time of operation. In fact, so characteristic is the feeling of carcinoma to the trained operator that in my own work I have insisted several times that a certain gland was malignant when the pathological report was the reverse, and a further sectional study brought this to light.

The three cases which stand out to me as complete surprises were diagnosed as large adenomas, and on operation proved to be cystic degeneration of carcinomatous glands. Recalling my impression of these cases leads me to believe that where one of the lobes by rectal examination appears out of proportion to the other in size, one should be suspicious of cancer, especially if the consistency of the large lobe is softer than the small.

Vice-versa, I have mistaken fibrous glands for carcinomatous, and in a few cases operation has disclosed the happy error. Nevertheless, I hold to my statement, although the microscope is the final judge, that by far the majority of malignancies of the prostate gland present characteristics to the trained

examiner that raise his suspicions of its existence at once. This in face of Young's statistics, which associate hypertrophy with 61% of malignancies. While this is true microscopically, macroscopically the cancer predominates.

In keeping with other carcinomas, metastasis is an important feature which requires accurate checking in every case for an intelligent outlook. Present treatment cannot be productive of the best welfare of the patient with a guesswork diagnosis, and cases with advanced metastasis should be treated palliatively rather than radically. The most common points of secondary growth are the pelvic bones, vertebræ, long bones and ribs, and any occurrence noted here by chance X-ray should lead to a prostatic examination. By direct extension the area of growth is usually limited by the fascia of Devovillier, and only in a very few cases is the rectum and urethra involved, and then only as a terminal manifestation.

The treatment of malignancies of this gland present one of the most serious problems of urological surgery, and are too commonly unsatisfactory from the viewpoint of both surgeon and patient. Various operations most radical in extent have been employed, but these in the hands of the average operator are usually a menace rather than a benefit.

At the Maine General Hospital, our handling of these cases has advanced with each proven step of technic, our aim being to minimize the severity of operation and hospitalization, alleviate the symptoms, and retard the advancement of the disease. Briefly, the obstructing portion of the gland is removed, preferably by transurethral resection. Following recovery, a suitable dose of radon seeds is implanted through the perineum, with the finger in the rectum as a guide. A course in deep X-ray therapy is instituted and the patient discharged with instructions to return for observation.

If open operation seems better suited to the particular case, the obstruction is removed under vision, removable radon seeds are implanted, and the patient left with suprapubic drainage for ten days, when the seeds are removed and the incision allowed to close. Deep X-ray is then instituted and patient discharged. The results from this

method of handling our cases, while not brilliant, have certainly been worthwhile. The relief of urinary symptoms is usually gratifying. Radon seed implantation, I am sure, is of value. Deep X-ray is to my mind an important feature, retarding the growth, shrinking the gland, and very beneficial to those cases where pain in the back and legs predominate. Where distant metastasis and absence of urinary symptoms are a feature, it is our only therapeutic measure.

The relative frequency of malignancy in our local work in comparison with all our prostatic obstructions runs higher than any of the statistics I have seen. As follows, they are: Young, 17%; Smith, 16%; Davis,

20%; Wilson, 15%; Fryer, 13%. The records of the last 308 cases handled by the urological staff as both service and private patients were studied at this hospital. Of these, ninety-two proved to be carcinoma. This gives us a 30% malignancy, and, while this exceeds other statistics, it is the first accurate tabulation I am acquainted with in a Maine institution. From this I attempt no conclusion, but emphasize strongly that carcinoma of the prostate gland is a very common condition in Maine, and careful rectal examination of patients by general men will do much to send these cases for treatment early.

Hemorrhagic Disease of the Newborn

By ROBERT W. BELKNAP, M. D., AND NEIL L. PARSONS, M. D., Damariscotta, Maine

REPORT OF FOUR CASES

During a period of three months of general practice, one of us (N. L. P., Case 1) has observed one case, the other (R. W. B., Cases 2, 3, 4) three cases of hemorrhagic disease of the newborn, with one fatality.

While the etiology of this disease is not known, some authors have attributed it to vitamin deficiencies in the mother. Moore and Brodie (1, 3) believe there is a lack of vitamin B. Brown and Tisdall (2, 3) have pointed out the relationship between vitamin A, ultra-violet light and the incidence of hemorrhagic disease of the newborn. The cases here reported might bear out the ultra-violet light hypothesis, since they occurred at the season when the sun's intensity is low and the mothers were compelled to stay indoors on account of much bad weather. On the other hand all were, as far as can be determined, on a sufficient and well-diversified diet.

Case 1. Baby L. W. Male, 9 lbs., 5 oz. Mother age 24. Para i. Rather obese. Pregnancy had been normal. A cousin gave birth to a child which was said to have bled at birth, but to have survived. Labor lasted eighteen hours. Not abnormally severe. Nor-

mal delivery. Received morphia gr. 1/8 twice and ether with second stage pains. Baby born December 7, 1931. On December 8, there was slight oozing from cord stump. It was retied. That night gauze dressing was saturated with blood, and catgut stitch was placed around cord margin in skin. The oozing continued. There were ecchymoses on thighs and forehead. December 9 it was given hemostatic serum (Lapenta) Mil. 0.50 every hour for nine doses, without effect. There was now vomiting of blood-streaked material and passage of streaks of dark blood in stools. December 11 it was given Mils 10. maternal serum subcutaneously, which was repeated in three hours. It was taken to Portland and placed under the care of Dr. Thomas Foster, who gave Mils. 20.0 of father's blood subcutaneously every three hours for three doses. A clamp was placed on cord stump. That night the bleeding ceased. There is still some disturbance of digestion, with vomiting, and baby at two months weighs 9 lbs., 8 oz.

Case 2. Mother age 37. Para vi. Very obese. Rapid, easy labor. Very little ether given. Baby A. I., male, 7 lbs. Born December 22, 1931. It was seen December 24

because of slight oozing from cord the day previous. There had been emesis of small amounts of dark material and it did not nurse well. There was slight bleeding from skin edge about cord. There was a small hematoma over parietal boss, which was aspirated. There were purpuric spots on forehead. It looked pale and showed respiratory irregularity. It was given Mils. 20 citrated whole maternal blood subcutaneously. December 25 there had been no further visible bleeding, but it had a general convulsion. The fontanel bulged and was tense. It developed further respiratory and cardiac irregularity, respiration at times ceasing entirely, and being restored by artificial respiration in a warm bath. It was extremely pale. It died about 4.00 P. M. Diagnosis: Intracranial hemorrhage. No necropsy.

Case 3. Mother, para iii. Looked pale, but hemoglobin was 80%, r. b. c. 5,000,000. Delivered by nurses immediately after entry into hospital. No ether given. Baby M. H., female, 7 lbs., 8 oz. Cord oozed slightly from cut end. Baby appeared normal, red and full-blooded. Born February 18, 1932. February 20 diaper was stained pink and later a brighter red, an extract giving test for hemoglobin. There was slight emesis of brownish material. Baby did not nurse well. There were a few purpuric spots on hard palate and in nape of neck. It was given Mils. 20 citrated whole maternal blood subcutaneously, repeated that night and again next morning, because urine was still pink. There was no further hematuria after third injection and baby nursed well. There was no pallor at any time. It gained and nursed well.

Case 4. Mother, para i, age 18, had had threatened premature labor at seven months, followed by a bronchial infection, with cough and fever for one week. She had been on a full, well-balanced diet and had gained weight. Labor lasted about twelve hours. Delivered by easy low forceps, because of large size and lack of progress. There was profuse postpartum hemorrhage for a short time, easily controlled by pituitrin and gynergen. She had received two capsules pentobarbital-sodium and usual obstetric

ether. Baby W., female, 9 lbs., 8 oz., born March 12, 1932. Cord was very thick and required tying one hour after birth. There were slight purpuric spots over forehead and more markedly in nape of neck. Forceps marks were scarcely visible. Twelve hours later diapers were stained pink and purpuric spots were noted on hard palate and over parietal boss. It was given citrated whole blood from father, as mother was nervous and hysterical. March 13 there was an ecchymosis 1 inch in diameter over cheeks at points of forceps pressure, and on left cheek a steady ooze of blood from a slight abrasion. At 10.00 A. M. it was given blood in each buttock as before. December 14 the forceps abrasion was still oozing in lessened amount. It was given blood, as previously, into each thigh, and a few drops were dropped on the oozing area. There was no further bleeding, and baby appeared and nursed well. Next morning there was no bleeding and scab was scraped from abrasion to test bleeding time. It bled for about one hour, and then dried and crusted. There was moderate pallor at this time. Ecchymoses and injected blood have absorbed well.

SUMMARY

Four cases of hemorrhagic disease of the newborn, with a mortality of 25% with a high case incidence are reported.

Neither parity, age, diet, physical condition, type of labor, or use of drugs shows any constant causal relationship.

Mortality in one case was probably due to intracranial hemorrhage and not to blood loss *per se*. In other cases, injection of an average of 60 Mils. of whole citrated blood subcutaneously was apparently curative.

Citration was done by drawing into syringe 10% by volume of 2.5% sodium citrate c. p.

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**Similarity of the Toxic Forms of Thyroid Disease*

By ELLIOTT C. CUTLER, M. D., AND ROBERT ZOLLINGER, M. D., Boston, Mass.

The purpose of this report is to add emphasis to the growing conception that only one type of thyroid intoxication exists. At one time only the severe form of thyrotoxicosis (exophthalmic goiter, Graves' disease, Basedow's disease) was recognized, but as clinical studies improved, even before the day of the modern method for determining the basal metabolic rate, several varieties of thyroid were recognized. The groups were gradually divided into two major classes, hyperthyroidism without nodules in the thyroid gland and hyperthyroidism with nodules in the gland. The group without nodules was extended to include a variety of clinical conditions, and it came to be recognized that the size of the gland was not important; that exophthalmos was not always present; that during adolescence and with physiological activity a similar toxic condition existed; and that the heart was eventually injured by a long-standing period of toxicity. The adenomatous class seemed to be different, though moderate exophthalmos, the nervous manifestations, the elevation of the basal metabolic rate, and the effect on the circulation revealed definite similarities. With the popularization of the use of iodine in the treatment of all forms of toxic goiter, there seemed to some observers to be different reactions in the patients in these two groups. This difference appeared so great that some observers set up the hypothesis that the intoxicating agent was different in the two groups, and we find the names dysthyroidism and hyperthyroidism applied to the two classes. Thus Graves' disease was called dysthyroidism and toxic adenomata hyperthyroidism. This doctrine was never completely accepted, and as experience was accumulated the fundamental similarity of all the forms of thyroid intoxication was more generally appreciated. A study by Graham and Cutler (1), in 1925, of comparable groups of cases showed the similarity of responses to iodine in the adenomatous and non-adenomatous conditions. They advocated the pre-operative administration of iodine for "thyrotoxicosis," regardless of the presence or absence of adenomata. The fact was

stressed that a nodular goiter with hyperthyroidism did not require as long a period of iodination to be satisfactorily prepared for thyroidectomy as an exophthalmic goiter. This can be explained by the fact that there is present in adenomatous goiters a smaller amount of active thyroid tissue to undergo hypertrophy and hyperplasia. In other words, the smaller amount of active hyperplastic thyroid tissue about the adenomata accounts for the symptoms of thyrotoxicosis and not the adenomata. The total amount of over-active thyroid tissue, then, in nodular goiters with hyperthyroidism is frequently much less than in smaller glands of the exophthalmic type. It is reasonable to assume that less iodine and a shorter period of time is needed, therefore, in nodular goiters with hyperthyroidism to produce the involutional changes and lowering of the basal metabolic rate. This type of goiter requires more frequent readings of the basal metabolic rate if the patient is to be operated upon at the optimum time, that is, while the basal metabolic rate is on the decline. The fact that patients with thyroid intoxication reach an optimum point with iodination, and then if more iodine is given seem to escape from the benefits of this medication and may even be made worse has been a common observation. Also it has been determined by clinical experience that surgery carries a lessened risk if the basal metabolic rate is falling at the time of the operation. Some surgeons feel so strongly about this that they regard a high basal metabolic rate which is falling as indicating a safer condition for surgery than a low basal metabolic rate which has reached "bottom" and is rising. This finding emphasizes the importance of surgery being performed on patients with toxic goiter at a very definite time, and since such cases remain at the optimum level but a few days at most, it explains certain unfortunate reactions occurring in patients whose basal metabolic rate determinations are not frequently made.

Since 1926 many observers have studied this matter and have given great weight to the argument that there is only one form of

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thyrotoxicosis, whether the gland be nodular or otherwise (2, 3, 4). The conclusive proof of this similarity is further revealed in the more recent studies of the blood iodine content in the various forms of thyrotoxicosis (5).

Selection of the time for operation after the optimum time has passed occurs most frequently in cases of adenomatous goiter where there has been the prolonged administration of iodine without determinations of the basal metabolic rate. As has been explained, such cases have only a small amount of hyperplastic gland to involute through the iodine therapy. When the basal metabolic rate is finally determined, one is surprised to find it has remained unchanged or, more likely, elevated beyond the original level prior to iodine therapy. The patient is not so well prepared for operation, and if the basal metabolic rate is greatly elevated, surgery should be postponed and iodine therapy discontinued, to be resumed at a later period. These patients give the false impression of having reacted unfavorably to iodine therapy.

Our studies were made on seventy selected cases of hyperthyroidism in the Cleveland area. The clinicopathologic diagnosis was equally divided between adenomatous goiter with hyperthyroidism and exophthalmic goiter. Less than five in each group were selected from every one hundred cases, since only those patients were studied who, to their knowledge, had never received iodine in any form. The criteria set up for the selection of cases for this study were the same which we utilized for our study in 1925, viz.:

1. Primary admissions to the general surgical service without previous operative intervention, iodine treatment, X-ray or other definite therapeutic regimen.

2. Two or more pre-operative and one or more post-operative determinations of basal metabolic rate.

3. The administration of iodine (Lugol's solution) before operation.

4. Primary thyroidectomy following the administration of iodine.

5. Uncomplicated by active infectious disease, notably tuberculosis.

It is hoped that this rigorous selection permits us to deal more accurately with the question at hand than is often the case. Cases not selected for comparison of the two groups

as specified may be utilized for the purpose of further illustrating the reaction to iodine under variable conditions of dosage, time relations, influence of previous therapy, state of the thyroid, and hospitalization.

Concerning the differentiation of the two special groups compared the following may be stated:

1. *Exophthalmic Goiter.* Exophthalmos was present in most cases. There was diffuse parenchymatous hypertrophy and hyperplasia of the thyroid. The thyroid was not adenomatous (clinically), although small adenomata were recognized, after removal, in a few glands. Thrill and bruit were present. Nervous and vasomotor phenomena were prominent features. Tachycardia, palpitation, increased appetite, loss of weight and strength were well-marked symptoms.

2. *Toxic Adenoma.* Exophthalmos was absent in all cases. Adenomatous goiter was the outstanding clinical feature. Nothing comparable to the diffuse parenchymatous hypertrophy and hyperplasia that are said to characterize exophthalmic goiter were present. There was no thrill or bruit. Nervousness, vasomotor disturbances, increased appetite, loss of weight and strength, while present in mild degree and in various combinations, in some cases, were not striking clinical features.

These rigorously selected cases were then studied as to their similarity of response to iodine therapy and their reaction during the period of anesthesia and operation.

The average age of the adenomatous group was higher than the exophthalmic group, as was expected. They averaged 44 years as compared to 35.8 years for the latter. The period of bed rest and administration of iodine, as shown in Chart I, probably aver-

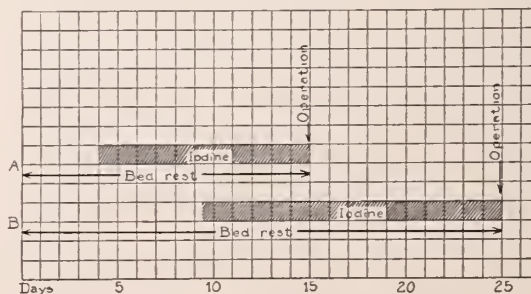


CHART I. Comparison of time and iodine requirements for pre-operative preparation of cases of (a) toxic adenoma and (b) Graves' disease.

Cutler and Zollinger, Boston.

ages a little longer than the majority of our cases. The average length of time in bed previous to operation for the exophthalmic group was 25 days, including an average of 15.6 days during which iodine was given. The duration of pre-operative treatment for the adenomatous group was considerably less, covering 15 days previous to operation, including 11 days in which iodine was administered. These periods of iodine therapy, which show 32% less time for the adenomatous group, represent a fairly standard difference. It is proper to add that rest in bed without iodine is of no great value to the patient, and in view of the many studies of this matter is now unnecessary. A study of Chart I will demonstrate how many days might be saved by immediate iodination, though it should be pointed out that some fall of the basal metabolic rate occurred in these cases previous to the giving of iodine.

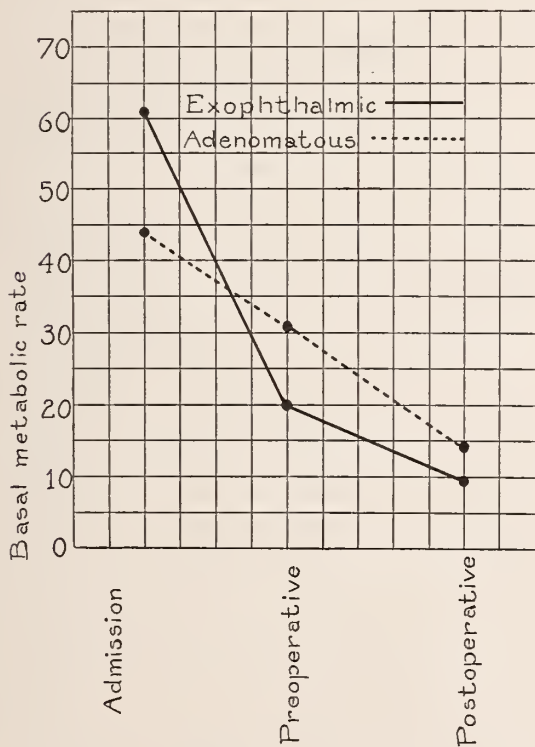


CHART II. Average basal metabolic rate curves of exophthalmic and adenomatous hyperthyroid cases.

Cutler and Zollinger, Boston.

Chart II compares the average basal metabolic rates of the groups. The exophthalmic

group had an average basal metabolic rate of 61% increase previous to iodine therapy compared to a 44.8% increase for the adenomatous group. The effect of iodine therapy was not so pronounced in the cases of adenoma with hyperthyroidism as we had expected. The basal metabolic rates fell from 44.8% increase to 31% increase, an average decline of 30.8%. This was less than half the drop made by the exophthalmic cases. The latter group fell from a 61% increase to a 19.9% increase in the basal metabolic rate for an average decline of 67.7%. The explanation for this greater difficulty in lowering the basal metabolic rate in cases of toxic adenoma is wanting, but may be related to the greater chronicity of these cases offering to them greater opportunity for iodination and the opportunity therefore to become refractory to iodine therapy.

The pulse rate and blood pressure were practically identical for the two groups. The incidence of cardiac disorders was much higher in the cases of adenoma with hyperthyroidism. This agrees with the findings of others and is probably to be attributed to the fact that the adenomatous group usually presents a less severe clinical syndrome and therefore is less likely to be recognized early in its course. The cardiac mechanism of these patients had probably been insulted by repeated flare-ups of hyperthyroidism over longer periods of time. These patients were also considerably older than the exophthalmic group and more in the natural age group of cardiovascular disease.

The amounts of iodine given averaged ten drops of Lugol's solution three times a day, or an equivalent amount of iodine in the form of potassium iodide. The amounts of iodine required have been worked out by Thompson (6) and others, and though it is of interest to note that as little as one drop of Lugol's solution a day may bring about a definite lowering of the basal metabolic rate, it is the consensus of opinion that in the pre-operative preparation of patients a fairly large initial dose and a high maintenance dose may bring about a more rapid recovery and can do no harm.

The pulse rate and blood pressure readings for the two groups were very similar during the period of anesthesia and operation (Chart

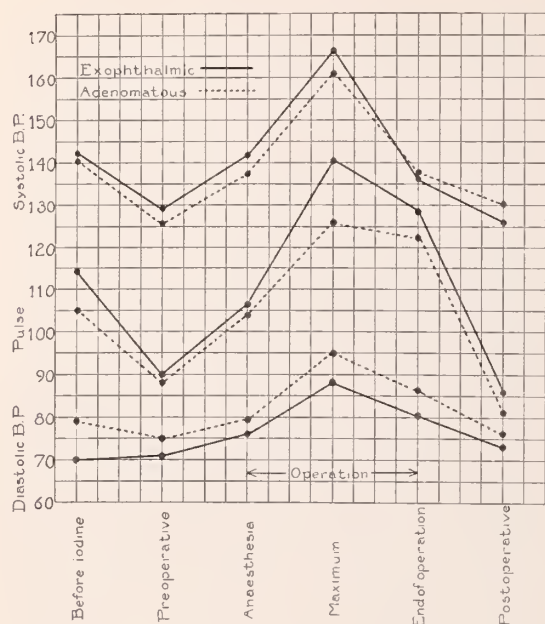


CHART III. Comparison of the pulse rates and blood pressure determinations in the two groups, revealing their similarity under surgical anesthesia and surgery, including the elevation of the pulse pressure during the operative procedure.

Cutler and Zollinger, Boston.

III). The pulse and blood pressure after anesthesia had been induced has a tendency to return to the pre-iodine level. This increase in the pulse pressure under anesthesia gives an indication of the toxicity of the patient. In doubtful or masked cases of hyperthyroidism the diagnosis may be established by giving the patient an anesthetic and finding a definite increase in the pulse pressure. The maximum increase reading during the operation was a little higher in the exophthalmic group. In the adenomatous group 120.5 gms. of thyroid was removed compared to 59.6 gms. in the exophthalmic group. The post-operative course of the adenomatous group were usually more uneventful. The pulse and pulse pressure in both types returned to a substantially lower level following operation.

It is apparent from the comparison of the two types that a fundamental difference does not exist. The chief variation appears in the difference in time taken to prepare the patient for operation and the extent of the decrease in the basal metabolic rate.

SUMMARY

1. The response of thirty-five selected cases of adenomatous goiter with hyperthy-

roidism to iodine therapy and operation was compared to a similar series of exophthalmic goiter.

2. Iodine was given on an average of 15.6 days in the exophthalmic group compared to only 11 days in the adenomatous group.

3. The basal metabolic rate decreased 67.7% during the period of iodine therapy in the exophthalmic group as compared to 30.8% in the adenomatous group.

4. Adenomatous goiter with hyperthyroidism requires a shorter period of iodine therapy than exophthalmic goiter and more frequent determinations of the basal metabolic rate to determine the optimum time for operation.

5. The pulse and blood pressure levels were practically the same for both groups, starting from before the administration of iodine to the post-operative period.

6. Adenomatous goiter with hyperthyroidism is essentially the same disease as exophthalmic goiter and should be similarly prepared for operation.

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Abstracts

"Dinitrophenol: Its Therapeutic and Toxic Actions in Certain Types of Psychobiologic Underactivity"

By JULES H. MASSERMAN, M. D., AND HARRY GOLD-
SMITH, M. D., Baltimore

The A. M. A. Journal, Feb. 17, 1934.

In their summary and conclusions they state: "The pharmacologic and psychotherapeutic effects of sodium dinitrophenol were studied in eighteen patients whose psychobiologic status was characterized by sluggishness, passivity and apathy. In therapeutic dosage the drug caused a mean rise of $32.9 \pm 3.31\%$ in the rate of oxygen consumption and a mean weight loss of 92/100 pound (417 gm.) per week. Toxic effects occurred in five cases and were characterized by a fall in blood pressure, tachycardia, acidosis, progressive stupor, and one death. Indeterminate or adverse psychotherapeutic effects were observed in eight and four cases, respectively, while six patients showed a definite improvement in their mental state, apparently attributable to the medication. Dinitrophenol is therefore unpredictably toxic to some patients, but its careful administration may be of empirical benefit in certain types of recent and insecurely established psychobiologic underactivity." L. H. S.

"Meningitis Due to the Influenza Bacillus of Pfeiffer"

By JOSEPHINE B. NEAL, M. D., HENRY WIRT JACK-
SON, M. D., AND EMANUEL APPLEBAUM, M. D.,
New York

The A. M. A. Journal, Feb. 17, 1934.

From their study of one hundred and eleven cases their deductions were that it is essentially a disease of early childhood, that the symptoms and pathology is like that of any purulent meningitis, and toxic changes of viscera are frequently encountered. Various therapeutic agents were used in the treatment, including a specific serum, none of which could be held in particular favor.

L. H. S.

"Intestinal Submucous Lipoma"

Panzer and Porretta; Detroit, Mich.

American Journal of Surgery, November, 1933.

Gastrointestinal lipomata are relatively uncommon. Hiller, in 1899, collected 23 cases. Later Dewis reported forty-four cases. Stetten, in 1909, after an exhaustive review of the literature, discovered seventy-two cases. A comprehensive survey of the intestinal lipomata was again made in 1930 by Comfort, who reported one hundred eighty-one cases.

Next to adenomatous polyps, lipomata are the most common benign lesions of the gastrointestinal tract. They may develop from the submucous layers and grow inward or from the subserous coat and project outward into the peritoneal cavity. There are cases on record where both types have been found simultaneously. They are usually firm, rounded lobulated tumors, sharply circumscribed from the surrounding tissue. They have a rich blood supply and present a peculiar structure, in that each lobule has a nutrient vessel.

Although benign, these tumors may undergo necrosis, cyst formation, calcification and myxomatous or sacromatous degeneration. They are found more frequently in the large intestine than in the small intestine. Of the seventy-two cases reported by Stetten, forty-one were in the colon and thirty-one were in the small intestine. Also, 50% of the patients were between the ages of forty and sixty years, a period of life in which there is a tendency toward adiposity.

It is interesting to note that 50% of the cases reported by Dewis developed intussusception. Comfort, in a series of ninety-one cases of intestinal lipomata, found intussusception as a complication in fifty-nine cases.

Unfortunately these lesions have no pathognomonic syndrome. Some may go undetected for years and cause no discomfort to the patients. Their most common way of producing symptoms is when bleeding occurs, due to ulceration, or when obstruction, with or without intussusception, has developed.

The X-ray has occasionally been used in an attempt to distinguish lipomata from other lesions, particularly malignancy, but it has proved unreliable in many instances. Albrecht has suggested that if an apparent benign abdominal tumor is palpable, and the patient is obese, with evidence of pilomata on the body elsewhere, a lipoma of the gastrointestinal tract should be suspected. Bland-Sutton called attention to the findings of a dimple on the serous coat of the bowel during exploration, due to the traction exerted by the lipoma.

Nevertheless, it must be admitted that, in spite of all the diagnostic means at our disposal, a diagnosis of lipoma is rarely made before operation. A positive diagnosis can only be assured when the tumor mass can be visualized through the proctoscope or when the lesion has prolapsed through the rectum externally.

The treatment is essentially surgical and varies according to the conditions and complications present. The ideal procedure is merely to incise the intestinal wall and enucleate the tumor. However, if the tumor is sessile and firmly adherent, and should enucleation thereby jeopardize the lumen of the bowel or leave a deficiency in the blood supply to the intestine, a resection may be necessary with an end-to-end anastomosis. Occasionally a two-stage operation is advisable, performing a preliminary cecostomy or appendicostomy, to be followed later by a resection.

W. H. B.

"Importance of Roentgenologic Examination of the Sinuses in Chronic Arthritis"

Snyder-Fineman-Traeger

This is a very well worth-while article which follows up previous work done by the authors, in conjunction with Lee Hurd, showing the etiologic relationship of sinusitis to chronic arthritis. Three hundred eighty-six cases of arthritis were studied roentgenologically. Presence of sinusitis was found in ninety-three of these. In seventy-seven of the ninety-six, the sinusitis was asymptomatic. Treatment of the sinusitis in these cases showed marked clinical improvement in the arthritis. The degree of arthritis bore no relationship to the degree of involvement of the sinuses. This bears out the

work of many other authorities that a latent sinusitis may act as a very distinct focus of infection. F. T. H.

"Effects of Drugs on Ciliary Activity of Mucosa of Upper Respiratory Tract"

Lierle-Moore

A very careful study of the effect of various drugs on the ciliary activity of mucous membrane was carried out, working with living cultures. These proved conclusively that water, when applied to the mucosa, caused a slowing of the ciliary beat. Ephedrine in 3% solution has no detrimental effect, but sometimes increases the activity. 5% cocaine is not detrimental to activity, but in stronger solutions produces definite slowing, but with good recovery. Mild silver proteins produce initial speeding, followed by slowing, which is probably due to the water solvent. 0.5% eucalyptol has no detrimental effect. Menthhol has a mild depressing effect of ciliary activity, as does thymol and eucalyptol in 1% solutions. Adrenalin (1-1000), zinc sulphate (2%), and mercurochrome (2%) are definitely detrimental. 0.5% silver nitrate is immediately and fatally detrimental to ciliary activity. These observations should be of considerable value in estimating the efficacy of routine therapy in treating respiratory mucous membrane. F. T. H.

"Acute Appendicitis"

By J. H. GARLOCK, M. D.

American Journal of Surgery, February, 1934.

Attention is directed particularly to early recognition and prompt treatment of post-operative complications in the effort to reduce mortality. In February, 1929, a group of seven hundred fifty-five cases was reported from the Surgical Division of the Old New York Hospital. This series of cases was treated in the years 1921-1928 with a mortality of 6.2%. The second series of four hundred thirty-three cases treated from January, 1928, to July, 1932, with a reduced mortality of 4.3% is herewith reviewed. A critical analysis is made of each of the twenty deaths.

Only cases proved to be acute appendicitis by gross appearance or by pathological section are included. McBurney incision was used in general. That no instance of gross wound infection occurred in the two hundred fifty-seven cases closed without drainage is ascribed to care in protection of the abdominal wall opening during removal of appendix and inversion of the stump.

The cigarette drain was used where drainage was indicated, usually two for insurance of an ample tract. Additional drains were employed where and as required. No sutures were used in the incisions in any of the drained cases except occasionally in the parietal peritoneum. This technique, pursued for several years, has resulted in improved appearance of post-operative wounds, almost complete absence of fascial slough, and reduction by two-thirds in the incidence of incisional hernia.

The detailed analysis of the twenty fatal cases is interesting and instructive. Autopsy was performed in eighteen out of twenty cases, a commendable percentage. Responsible factors in the fatalities were delay in instigating surgical at-

tack, diagnostic errors resulting in unfavorable location of incision necessitating extensive manipulation, removing an appendix in one instance where probably drainage alone should have sufficed, and conversely not removing an appendix which, not walled off, probably remained a source of continuing peritoneal infection.

The decreased mortality in this second smaller series was ascribed to meticulous post-operative care with individualization of cases, judicious use of intravenous glucose therapy, small transfusions, avoidance of routine catharsis and rectal drips. The majority of cases were operated upon by surgeons of considerable experience whose surgical judgment was sharpened.

The importance of early accurate diagnosis and prompt intelligent surgery is emphasized. The mortality rate can be diminished by careful post-operative care and intelligent treatment of complications.

This short paper could be generally read in detail with profit. C. H. J.

"Hypothyroidism"

BERG

American Journal of Surgery, February, 1934.

The time required for post-operative convalescence depends on various factors, such as the type of pathology involved, the severity of the surgery, the skill and judgment of the surgeon and the type of constitution of the patient, with special regard to his nervous system and his reno-cardio-vascular system. Complete post-operative care is essential to satisfactory convalescence, too many surgical half-cures resulting from the lack of it.

Assuming the satisfactory post-operative management of the case and intelligently directed treatment for the months ensuing before return to normalcy can be expected, a consideration of the question of hypothyroidism is invited. The author notes that cases with hypothyroidism do not progress as well, while those individuals with high normal thyroid function convalesce with unusual rapidity. Some cases are cited.

Retarded convalescence was noted in various instances to be coupled up with a moderate grade of thyroid insufficiency. The author feels that whereas the surgeon has concerned himself greatly over the question of hyperthyroidism, the matter of the diminished function of that highly important gland has been pretty much overlooked. There the degree of dysfunction is not that of myxedema or cretinism, but the minor grades of insufficiency.

Masked hypothyroidism is more prevalent in the opinion of the writer, than the supposedly more common opposed condition of occult hyperthyroidism. Because the condition is dormant, not uncommon, considered as ordinary fatigue, or "lack of pep," it is well to keep in mind, inasmuch as, once recognized, it is most satisfactorily treated by small doses of desiccated thyroid. If unsuspected, or untreated, it may be responsible for long-delayed convalescence after surgery, or, indeed, rob the well-directed or well-executed surgical attack of its desired reward of success. The surgeon must be enough of an internist to keep considerations of this type in mind.

The article reviewed above brings out a point worth while in respect to occult hypothyroidism. Incidentally it sounds the warning note, not to be forgotten, that "no one can be a good physician who has no idea of surgical operations, and a surgeon is nothing if ignorant of medicine" (Cushing). C. H. J.



The President's Page

TO THE MEMBERS OF THE MAINE MEDICAL ASSOCIATION :

The first distinctly clinical session of the Maine Medical Association has been held at Bangor, on February 20th and 21st. The time of year and the radio storm reports conspired to make it difficult for many to attend. The clinics were well planned, exceptionally well presented and enthusiastically followed by those privileged to attend. The cases were well presented and the important points brought out with the ease and detail of thorough students and able clinicians, which the Bangor group again have proven themselves to be. The President of the Association wishes to express his appreciation to the Eastern Maine General Hospital and its entire staff for this excellent start in clinical instruction sessions of the Association. Medicine has gone a long way from the time when clinical practice was essentially an individual accomplishment. Good clinical work may now be done by the individual alone, but far better clinical work is done by the coödnation and coöperation of individuals and groups. To that end, it would seem desirable that such sessions be given from time to time by each of the larger centers of the state.

Again the storm, cold and impassable roads have slowed up the state-wide examinations of children to determine those who are suffering from the lack of proper nourishment. Definite progress has been made, in spite of these conditions, and the examination cards are going forward to the State Bureau of Health. It is desirable that every effort be made to complete this work as soon as possible.

The February meeting of the Oxford County Society suffered from a small attendance, which was also due to a storm of blizzard proportions. The writer had a delightful visit with the Rumford group.

W. E. KERSHNER.



Necrology

Angus G. Hebb, Bridgton, 1868-1933

Dr. Hebb died October 14, 1933, at his home in Bridgton, where he had long been suffering from heart disease, but had practiced there thirty-two years.

He was born in Maitland, N. S., November 22, 1868. In his youth he was brought by his parents to live in Bridgton.

He graduated from Bridgton Academy in 1892 and from Bowdoin College in 1896. He then entered the Long Island Medical School, graduating in 1899. After a year of medical practice in Gorham, N. H., he moved into Bridgton in 1901 and practiced there the rest of his life.

He had a large practice in Bridgton and the surrounding towns. He was very devoted to the health of his town, and to many civic and other organizations. He was a member of Oriental Lodge, F. and A. M.

Dr. Hebb attended the meetings of our Association with great frequency, wrote a few papers on case reports, and often entered into discussions of papers by other members.

He married Miss Jennie Simpson, of Bridgton, who survives him, with nine children.

J. A. S.

Eben Jordan Marston, Bath, 1870-1933

Dr. Marston was the son of Edward T. Marston and Frances J. Allen Marston. He was educated in the Bath schools and graduated from Bowdoin Medical School in 1893. He served very efficiently as interne at the Maine General Hospital for a year, and then settled in Bath.

Dr. Marston died on December 31, 1933.

He was a faithful member of our Association and was active in several Masonic organizations, particularly the St. Albans Commandery.

Previous to his retirement six years ago Dr. Marston practiced extensively in Auburn and Bath.

Dr. Marston married Miss Nellie Clark of Bath, who survives him.

J. A. S.

Charles Colby Larrabee, Prospect Harbor, 1847-1932

Owing to some misunderstanding, we are only at this late date inserting a notice of the death of our former respected member, who died December 27, 1932.

Dr. Larrabee was born in Carroll, Maine, on December 12, 1847. He attended Lee Normal Academy, Bowdoin Medical School, and graduated from Dartmouth Medical School in 1883.

He practiced medicine in Springfield and Kingman before settling in Prospect Harbor. He married Miss Maria B. Bunker of Franklin.

J. A. S.

Carl R. O'Brien, Bangor, 1885-1934

At the early age of forty-nine, Dr. O'Brien, of Bangor, celebrated in that part of Maine as a heart specialist of great ability, died suddenly after but a few days' illness from heart disease, from which he had been a sufferer for a number of years.

He was born in Boston, the son of the late William and Sarah O'Brien. He graduated from Tufts Medical School, and then spent some time in Vienna specializing in heart and lung disease.

He practiced first in Boston. Coming to Bangor in 1915, he soon built up a fine practice, based upon his medical knowledge and his charming personality.

Shortly after moving to Bangor he married Miss Lucille Cassidy, who survives him.

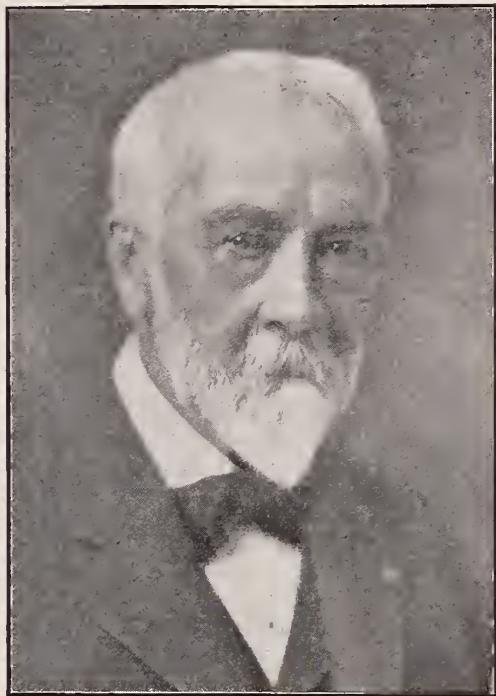
He was active in politics and took a great interest in the advancement of Bangor as a city.

During the late war he served as Captain in the Army Medical Corps. He was a member of the American, Massachusetts, and

Maine Medical Associations, and the National Tuberculosis Society.

Dr. O'Brien was a constant attendant at our medical meetings, and presented papers on tuberculosis and heart disease. His death leaves a vacancy in our ranks.

J. A. S.



***Abner Orimel Shaw,
Portland, 1837-1934***

After a short illness from pneumonia, Dr. Shaw, for many years a practicing physician in Portland, and one of the oldest, if not the oldest member of the Maine Medical Association, died January 27, 1934. Although he had long since retired from active practice, he continued his personal interest in medicine up to the last.

He was born in Readfield, February 16, 1837, son of the Rev. Eaton and Mary Roberts Shaw. As his father was a Methodist minister, he was frequently transferred to various towns, and Dr. Shaw received his early education in several different schools in Maine. He obtained his medical education and degree from the College of Physicians and Surgeons at Columbia University in 1863.

Immediately after graduating, he enlisted in the "Crack 7th N. Y. Regiment" to serve in the Civil War. The ambition of all graduates was to be enlisted in the New York 7th Regiment at that time. He later returned to Maine and was enrolled as assistant surgeon with the 20th Maine Regiment, almost immediately being promoted to surgeon. He served several years during the war, at the end of which he held the rank of Brigade Surgeon.

When the war was over, he married Elizabeth M. Sanford, of New York, and settled in Portland for general practice for the rest of his life.

Dr. Shaw retired in his eightieth year. He was rather short of stature, always glad to stop and talk with fellow practitioners, and was extremely popular.

He attended the medical meetings with great regularity, generally had something to say on the papers that were presented, but was not voluminous as a writer. He liked to do his share in the discussions. So far as we can recall, he was one of the most popular physicians of Portland.

He belonged to various military and Masonic societies. He leaves with all of us members of the M. M. A. a most agreeable memory.

He is survived by a son, Edward Shaw, and a daughter, Mrs. Frank Bradford, and three grandchildren, all of Portland.

Altogether it was a great pleasure to have met such a man, passing through the world of medical practice.

J. A. S.

Dennis Edward Sullivan, Concord, N. H., 1864-1934

I never visited Concord, N. H., without making a call on Dr. Sullivan, one of the great men of medicine, not only in New Hampshire, but all over New England. We always had much to say to one another, and I never parted from him without looking him in the face and hoping to see him again.

Born in Augusta, August 13, 1864, Dr. Sullivan died in Concord after a serious operation about a week previous. He died January 19, 1934.

He became Secretary of the New Hampshire Medical Society in 1906 and continued in that office until his death. In all the years that he held that office he had guided the state society successfully, interested its members in writing papers, and in attendance at the state and county meetings. He also labored faithfully for the improvement of the American Medical Association.

He served as an active member of the State Board of Health from 1913 to his death. He gave a great amount of time and knowledge to that office.

During the World War he was Captain in the Medical Corps at two base hospitals. He served for many years on the U. S. pension examining board.

Dr. Sullivan married in Portland, Maine, in 1889, Mary Scanlon, who survives him, as does one son, Paul M., of Concord.

Amongst his numerous gifts to the profession, Dr. Sullivan and his wife established the Sullivan Children's Ward in the Margaret Pillsbury Hospital, in memory of their son, Dr. Edward Sullivan.

It is very difficult to write a condensed life in this small space of the JOURNAL of so brilliant a man as Dr. Sullivan. We trust a larger document, a more careful eulogy of this estimable physician will be presented for the benefit of the profession and the public.

J. A. S.

County News and Notes

Cumberland

The 126th stated meeting of the Cumberland County Medical Society was held February 23, 1934. The meeting was held at the Eastland Hotel.

Meeting called to order by the President, Dr. Eugene Holt, Jr. Minutes of the last meeting read and accepted.

The following committees were appointed: Dr.

George Woodman and Dr. E. W. Files, to draw up resolutions on the death of Dr. B. D. Ridlon, of Gorham, and Dr. Walter Tobie and Dr. Eaton Lothrop, on the death of Dr. A. O. Shaw.

A communication from Dr. F. J. Robinson, of Fairfield, read. No action taken upon it.

Dr. Thomas A. Foster presented to the Cumberland County Medical Society a blackboard, which has been greatly needed, and which went into use immediately.

Dr. Clement S. Wilson, of Brunswick, was voted into the society and the name of Dr. Henry Johnson, of Brunswick, was presented.

Miss Waldo, the local administrator for the F. E. R. A., was our guest and briefly outlined her position as such in relation to the doctors. She answered several questions asked her by some of the physicians present.

The following motion was moved and seconded:

"That the Cumberland County Medical Society in session asks that the Portland Poor Department discontinue dispensing drugs. That such drugs be furnished or dispensed by those licensed to do that class of work."

The paper of the evening was "Correlation of Clinical and Pathological Findings in Bright's Disease," by Dr. Sidney C. Dalrymple, acting Pathologist and Instructor at the Tufts Medical School. This paper was presented in an unusual and most interesting way. The speaker distributed forms, which were filled in by the listener as the subject was amplified.

Preceding the meeting there was a very interesting clinic at the Maine General Hospital, although the attendance was small, due to a severe blizzard.

Meeting adjourned at 10.30 P. M.

Respectfully,

WILLIAM HOLT,
Secretary.

Portland Medical Club

The regular monthly meeting of the Portland Medical Club was held at the Columbia Hotel, on Tuesday evening, February 6th, at 8.00 P. M. Dr. Henry P. Johnson gave a very interesting paper on "Some Effects of Climatic Changes on the Mucous Membranes of the Upper Respiratory Tract." He presented his own observations and conclusions. This was followed by an interesting discussion.

Dr. Carroll Schwartz, Dr. Irvin Senter, and Dr. Edward Hynes were elected members of the club.

ALICE WHITTIER, M. D.,
Secretary.

Kennebec

The meeting of the Kennebec County Medical Association was held at the Gardiner General Hospital, in Gardiner, Thursday afternoon and evening, February 15, 1934.

The meeting was called to order at 5.00 P. M. The minutes of the last meeting were read and approved. This was followed by a Clinical Program, which was presided over by Dr. George W. Alexander, President, Gardiner, Maine.

Dr. William O. Cobb, of Gardiner, was admitted to membership.

Clinical Program:

Dr. C. G. Farrell, Gardiner, "Massive Carcinoma of the Liver."

Dr. R. D. Simons, Gardiner, "Volvulus of the Ileum."

Dr. F. B. Bull, Gardiner, "Pyloric Stenosis" (two cases).

Dr. Geo. W. Alexander, Gardiner, "Pleurisy with Effusion."

6.30, dinner served at the hospital.

Meeting was again called to order at 7.30.

Dr. W. E. Kershner, of Bath, President of the Maine Medical Association, spoke briefly relative to the Clinical Session of the Maine Medical Association to be held at the Eastern Maine General Hospital, Bangor, February 20th and 21st.

Dr. Frederick T. Hill outlined briefly the program for the state medical meeting to be held at Bangor, May 28th and 29th.

The following papers were read at the Scientific Program:

Dr. B. I. Wulff, of Waterville, "Intravenous Urography." This paper was discussed by Dr. A. B. Allen, of Waterville.

Dr. F. B. Bull, of Gardiner, "Blood Transfusions." This paper was discussed by Dr. A. H. McQuillan, of Waterville.

These papers were very carefully prepared and brought out a great deal of valuable information, and were ably presented.

There were thirty-five members present.

Meeting adjourned.

Respectfully submitted,

FREDERICK R. CARTER, M. D.,
Secretary.

Oxford

A regular meeting of the Oxford County Medical Association was held at Rumford, Maine, February 23, 1934.

The business meeting was held at 3.00 P. M., when Drs. Lester Adams, of Greenwood Mountain, and Albert L. Courville, of Rumford, were elected members. After the business meeting, Dr. W. E. Kershner, President of the Maine Medical Association, talked on physicians' liability insurance.

At 6.30 P. M. the physicians, with their ladies and invited guests, enjoyed a dinner at Hotel Harris, after which Dr. Kershner gave his very interesting and instructive paper on "Some Mas-toid Problems in General Practice."

Owing to the severe weather and bad traveling, the physicians in the western part of the county were unable to be present.

J. S. STURTEVANT, M. D.,
Secretary.

Medical Clippings and Notes

We have received from Dr. Cecelia Williamson, of the staff of the East Suffolk and Ipswich Hospital (England), a pamphlet on the Contributory Scheme for the support of that hospital which has been in force with great success for eight years. The idea of the scheme is to help to maintain the hospital on a voluntary basis and to enable those who are not able to provide treatment in a private nursing home or their own homes, by a weekly contribution to secure hospital treatment when required.

The standard contribution for men and heads of households is six cents a week; women, four cents; and outdoor laborers, four cents.

Various income limits are set for contributors, and when their income exceeds the limit, they can subscribe to the private patient subscription scheme.

"It must be clearly understood that only those who, owing to the gravity of their illness and on account of their financial position, are unable to obtain adequate medical and surgical treatment, are entitled to attend the hospital, and that the decision as to whether the patient is in need of hospital treatment rests with the Medical Staff of the hospital."

A large number of rules are attached to the circular, which we need not enlarge upon.

Any charitable people inclined to work out any such plan in Maine will find full details with Miss Gardner, our Secretary.

We note, in conclusion, that out of a total annual income of \$200,000.00, \$150,000.00 were raised from this Contributory Scheme.

The Role of Irradiated Milk versus Viosterol In Combating Hypercalcemia

According to Abeloff and Sobel (*Archives of Pathology*, 14: 4) hypercalcemia may follow overdosage with Viosterol (Irradiated Ergosterol).

According to Duncan and Huffman (*Jour. Dy. Se.* XVII: 2), in studying the possibilities of overdosage with Viosterol, it is their opinion that massive doses produce in a calf, hypercalcemia, hemorrhagic gastritis, enlarged and softened kidneys, and symptoms of extensive renal damage. However, when controlled animals were provided with sufficient calcium and phosphorus, the above symptoms were not observed.

According to Marriott (*Infant Nutrition*: C. V. Mosby Co., Publ.), Page 66: "An excess of vitamin D in the diet may result in abnormal calcification throughout the body."

Page 295: "Viosterol, 100-D, is a rich source of vitamin D; it does not, however, supply the equally necessary vitamin A; furthermore, Viosterol is a potent substance, the use of which is not untended by danger."

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"As to the kind of extra carbohydrate to be added, whether lactose or maltose, I believe dextri-maltose to be better in general in cases of fat indigestion infantile atrophy."—C. H. Dunn: *The Hygienic and Medical Treatment of Children*, Southworth Co., Troy, New York, 1917, V. 1, p. 418.

In discussing the treatment of decomposition Feer says: "The period of repair may be shortened by giving suitable additional food; the best, probably, being buttermilk to which carefully regulated proportions of dextrin and maltose preparations or malt soup are added."—E. Feer: *Text-Book of Pediatrics*, J. B. Lippincott Co., Phila., 1922, p. 284.

In the treatment of infantile atrophy Fischer recommends the following: "The carbohydrate should be increased by gradual addition of dextri-maltose.

"Malt soup or dextrimaltose (Mead's) should be added in teaspoonful or more doses to each feeding until the point of carbohydrate tolerance is reached."—L. Fischer: *Diseases of Infancy and Childhood*, F. A. Davis Co., Phila., 1925, V. 1, p. 285.

Concerning the treatment in the case of a premature infant Fischer states: "Dried milk with water was given, which later was changed to whole milk, 14 ounces; water, seven ounces, and dextrimaltose No. 1, one and one-half ounces. Seven feedings of three ounces each every three hours was given. The above feeding was retained. The infant gained eight ounces at the end of the first week."—L. Fischer: *Clinical notes in a series of premature infants*, *Arch. Pediat.* 44:227-231, April, 1927.

Grulec, in discussing the treatment of decomposition says: "As a rule it is best to start with 2 to 2½ or 3 ounces of albumin milk to the pound weight in 24 hours; the sugar to be added is in the form of a maltose-dextrin mixture. One should never delay too long in adding this."—C. G. Grulec: *Infant Feeding*, W. B. Saunders Co., Phila., 1922, p. 265.

Referring to the hypotrophic infant Herrman writes: "In mild cases, the addition of dextrimaltose instead of cane or milk sugar may be sufficient to obtain a gain in weight."—C. Herrman: *The treatment of nutritional disorders in artificially-fed infants*, *New York M. J.* 114:158-160, August, 1921.

In discussing artificial feeding in athrepsia, Hess states: "The carbohydrates are usually added in a slowly fermentable form, such as the maltose and dextrin compounds, which are usually started by the addition of four grams per kilogram (1/15 ounce per pound) and increased until eight grams or more per kilogram (¼ ounce per pound) of body weight are added."—J. H. Hess: *Feeding and the Nutritional Disorders in Infancy and Childhood*, F. A. Davis Co., Phila., 1928, p. 278.

Concerning the treatment of marasmus, Hill says: "When the stools have become smooth and saucer-like, carbohydrate, in the form of dextrimaltose, may be gradually added up to the limit of tolerance."—L. W. Hill: *Practical Infant Feeding*, W. B. Saunders Co., Phila., 1922, p. 281.

"A spasmophilic baby on bottle feeding should receive a limited amount of milk—a pint, or at the most 24 ounces in the 24 hours—to which cereal gruel and some form of sugar is added, preferably one of the malt dextrin preparations; also the early addition of other foods than milk to the baby's diet."—M. Jampolis: *Infantile spasmophilia*, *Interstate M. J.* 25:652, Sept., 1918; *abst. Arch. Pediat.* 35:691, Nov. 1918.

With reference to the treatment of diarrhea Lust writes: "After several days, 2% to 3% of a maltose-dextrin preparation may be added (Dextri-Maltose). This is preferable to the easily fermentable lactose or cane sugar."—F. Lust: *The Treatment of Children's Diseases*, J. P. Lippincott Co., Phila., 1930, p. 145.

"The treatment of artificially fed children in the first of these groups consists in putting them on a low fat dietary, and giving them carbohydrate in the form of one of the less fermentable sugars—e.g., dextrimaltose."—L. G. Parsons: Wasting disorders of early infancy, *Lancet*, 1:687-694, April 5, 1924.

Pearson and Wyllie in discussing the treatment of milder cases of inanition say: "Regulation of this disturbed organismal balance is obtained by the addition of carbohydrates, while fat and casein are reduced. For this purpose dextrimaltose and flour are better than the ordinary sugars, since they are more slowly absorbed and have greater efficacy in their powers of controlling the flora in the large intestine."—W. J. Pearson, and W. G. Wyllie: *Recent Advances in Diseases of Children*, P. Blakiston's Son & Co., Phila., 1930, p. 116.

Regarding the treatment of the marantic infant, Raue states: "After the intolerance to sugar has been overcome a carbohydrate, preferably Dextri-maltose, may be added."—C. S. Raue: *Diseases of Children*, Boericke & Tafel, Phila., 1922, p. 427.

In discussing the treatment of atrophy, Thursfield and Paterson, state: "If the baby continues to improve, the next step in the treatment is to add to the milk one of the less fermentable carbohydrates, such as dextrimaltose . . ."—H. Thursfield and D. Paterson: *Diseases of Children*, William Wood & Co., 1929, p. 105.

"I also find dextri-maltose an excellent addition to albumin-milk when the first object of that food has been achieved and a gain in weight is desired in this way I have succeeded in feeding albumin-milk far beyond the period usually advised, with highly gratifying results."—F. L. Wachenheim: *Infant-Feeding; Its Principles and Practice*, Lea & Febiger, Phila., 1915, p. 158.

"Dextri-maltose has been substituted for lactose not infrequently, when the tolerance for the latter continues low."—I. H. West: *Low fat, high starch evaporated milk feeding for the marasmic baby*, *Arch. Pediat.* 48:189-193, March, 1931.

"Malt sugar is indicated when others fail to produce a sufficient gain, or when malassimilation of fat is evident."—O. H. Wilson: *The role of carbohydrates in infant feeding*, *Southern M. J.* 11:177, March, 1918; *abst. Arch. Pediat.* 35:447, July, 1918.

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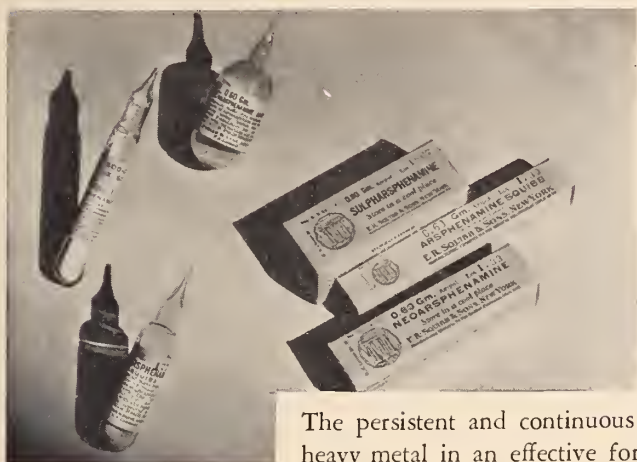
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Dextri-Maltose, Carbohydrate of Choice

In gastrointestinal disorders, "Dextri-maltose has been preferred to the other sugars as apparently less irritating."—E. Cassie and U. Cox: *The examination of the gastric contents in infants, with some considerations as to the value of lactic acid milk in infant feeding*, *Lancet*, 2:322-325, August 14, 1926.

"As to the kind of extra carbohydrate to be added, whether lactose or maltose, I believe dextri-maltose to be better in general in cases of fat indigestion infantile atrophy."—C. H. Dunn: *The Hygienic and Medical Treatment of Children*, Southworth Co., Troy, New York, 1917, V. 1, p. 418.

In the treatment of decomposition, "The period of repair may be shortened by giving suitable additional food; the best, probably, being buttermilk to which carefully regulated proportions of dextrin and maltose preparations or malt soup are added."—E. Feer: *Text-Book of Pediatrics*, J. B. Lippincott Co., Phila., 1922, p. 284.

In infantile atrophy, "The carbohydrate should be increased by gradual addition of dextrimaltose.

"Malt soup or dextrimaltose (Mead's) should be added in teaspoonful or more doses to each feeding until the point of carbohydrate tolerance is reached."—L. Fischer: *Diseases of Infancy and Childhood*, F. A. Davis Co., Phila., 1925, V. 1, p. 285.

In the case of a premature infant, "Dried milk with water was given, which later was changed to whole milk, 14 ounces; water, seven ounces, and dextri-maltose No. 1, one and one-half ounces. Seven feedings of three ounces each every three hours was given. The above feeding was retained. The infant gained eight ounces at the end of the first week."—L. Fischer: *Clinical notes in a series of premature infants*, *Arch. Pediat.* 44:227-231, April, 1927.

In the treatment of decomposition, "As a rule it is best to start with 2 to 2½ or 3 ounces of albumin milk to the pound weight in 24 hours; the sugar to be added is in the form of a maltose-dextrin mixture. One should never delay too long in adding this."—C. G. Grulee: *Infant Feeding*, W. B. Saunders Co., Phila., 1922, p. 265.

With reference to hypotrophy, "In mild cases, the addition of dextrimaltose instead of cane or milk sugar may be sufficient to obtain a gain in weight."—C. Herrman: *The treatment of nutritional disorders in artificially-fed infants*, *New York M. J.* 114:158-160, August, 1921.

In athrepsia, "The carbohydrates are usually added in a slowly fermentable form, such as the maltose and dextrin compounds, which are usually started by the addition of four grams per kilogram (1/15 ounce per pound) and increased until eight grams or more per kilogram (¼ ounce per pound) of body weight are added."—J. H. Hess: *Feeding and the Nutritional Disorders in Infancy and Childhood*, F. A. Davis Co., Phila., 1928, p. 278.

Concerning the treatment of marasmus, "When the stools have become smooth and salve-like, carbohydrate, in the form of dextrimaltose, may be gradually added up to the limit of tolerance."—L. W. Hill: *Practical Infant Feeding*, W. B. Saunders Co., Phila., 1922, p. 281.

In the feeding of prematures, "As soon as there is a hesitation in the gain in weight, dextrimaltose No. 1 is substituted for the dextrose, in the same amount in the mixture, with almost invariably a gain in weight."—F. B. Jacobs: *Relation of irradiated food substances and ergosterol versus cod liver oil in childhood nutrition*, *Pennsylvania M. J.* 35:164-167, Dec., 1931.

"A spasmophilic baby on bottle feeding should receive a limited amount of milk—a pint, or at the most 24 ounces in the 24 hours—to which cereal gruel and some form of sugar is added, preferably one of the malt dextrin preparations; also the early addition of other foods than milk to the baby's diet."—M. Jampolis: *Infantile spasmophilia*, *Interstate M. J.* 25:652, Sept., 1918; *abst. Arch. Pediat.* 35:691, Nov., 1918.

In cases of malnutrition and indigestion, "The appetite improves rapidly, and the stools soon become normal in appearance, if the sugars are intelligently prescribed. By this I refer to proper proportions of dextrin and maltose. When there is a tendency to looseness, I have used the preparation known as 'dextri-maltose,' for the extra

carbohydrates; . . ."—M. Ladd: *Further experience with homogenized olive oil mixtures*, *Arch. Pediat.*, 33:501-512, July, 1916.

In pyloric stenosis, "With low dextrose tolerance, a maltose dextrin preparation may be added in whole or in part. Even where the dextrose is well tolerated and gain in weight has ceased, impetus to the weight intake may be given by the addition of a maltose dextrin preparation."—D. J. Levy: *Pyloric stenosis and pylorospasm of infancy with especial reference to medical treatment*, *J. Michigan St. M. S.*, 21:166-170, April, 1922.

With reference to the treatment of diarrhea, "After several days, 2% to 3% of a maltose-dextrin preparation may be added (Dextri-Maltose). This is preferable to the easily fermentable lactose or cane sugar."—F. Lust: *The Treatment of Children's Diseases*, J. B. Lippincott Co., Phila., 1930, p. 145.

In dyspepsia, "The carbohydrate must not be allowed to exceed 3 per cent. Dextri-maltose is the most suitable sugar."

In the treatment of decomposition atrophy, malnutrition, marasmus, "... when there has been obvious improvement, dextri-maltose is gradually increased from 3 to 5 per cent."—B. Myers: *The nutritional disturbances of infancy*, *Brit. M. J.*, 1:1079-1083, June 21, 1924.

"The treatment of artificially fed children in the first of these groups consists in putting them on a low fat dietary, and giving them carbohydrate in the form of one of the less fermentable sugars—e.g., dextrimaltose."—L. G. Parsons: *Wasting disorders of early infancy*, *Lancet*, 1:687-694, April 5, 1924.

In the milder cases of manition, "Regulation of this disturbed organismal balance is obtained by the addition of carbohydrates, while fat and casein are reduced. For this purpose dextrimaltose and flour are better than the ordinary sugars, since they are more slowly absorbed and have greater efficacy in their powers of controlling the flora in the large intestine."—W. J. Pearson and W. G. Wyllie: *Recent Advances in Diseases of Children*, P. Blakiston's Son & Co., Phila., 1930, p. 116.

In intestinal antoxication, "I have had more experience with dried skimmed milk in which 2 to 5 per cent dextrimaltose, barley or rice flour has been cooked, and the mixture subsequently fermented by lactic acid bacilli or soured with lactic acid, than with any other food except protein milk."—G. F. Powers: *A comprehensive plan of treatment for the so-called intestinal intoxication of infants*, *Am. J. Dis. Child.*, 32:232-257, August, 1926.

Regarding the treatment of the marantic infant, "After the intolerance to sugar has been overcome a carbohydrate, preferably Dextri-maltose, may be added."—C. S. Raue: *Diseases of Children*, Boericke & Tafel, Phila., 1922, p. 427.

In spasmophilia, "Dextri maltose is the best sugar to use in these cases, in the proportion of 6 to 8 per cent."—J. H. Reading, Jr.: *Spasmophilia*, *Hahneman. Monthly*, pp. 403-411, July, 1922.

In the treatment of atrophy, "If the baby continues to improve, the next step in the treatment is to add to the milk one of the less fermentable carbohydrates, such as dextrimaltose; . . ."—H. Thursfield and D. Paterson: *Diseases of Children*, William Wood & Co., 1929, p. 105.

"I also find dextrin-maltose an excellent addition to albumin-milk when the first object of that food has been achieved and a gain in weight is desired in this way I have succeeded in feeding albumin-milk far beyond the period usually advised, with highly gratifying results."—F. L. Wachenheim: *Infant-Feeding; Its Principles and Practice*, Lea & Febiger, Phila., 1915, p. 158.

"Dextri-maltose has been substituted for lactose not infrequently, when the tolerance for the latter continues low."—J. H. West: *Low fat, high starch evaporated milk feeding for the marasmic baby*, *Arch. Pediat.* 48:189-193, March, 1931.

"Malt sugar is indicated when others fail to produce a sufficient gain, or when malassimilation of fat is evident."—O. H. Wilson: *The role of carbohydrates in infant feeding*, *Southern M. J.* 11:177, March, 1918; *abst. Arch. Pediat.* 35:447, July, 1918.

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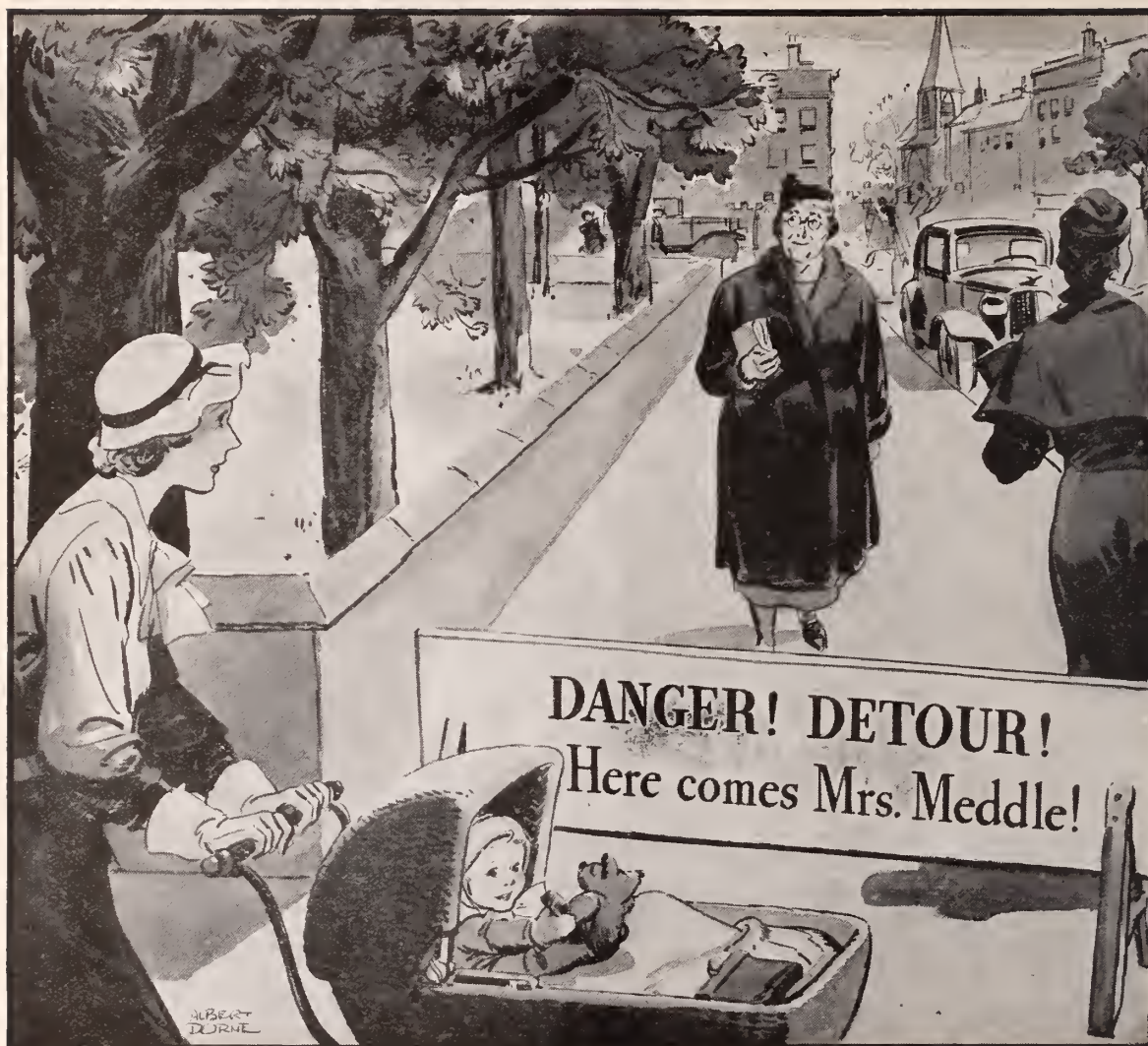
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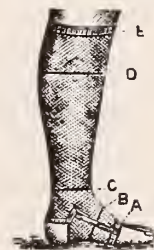
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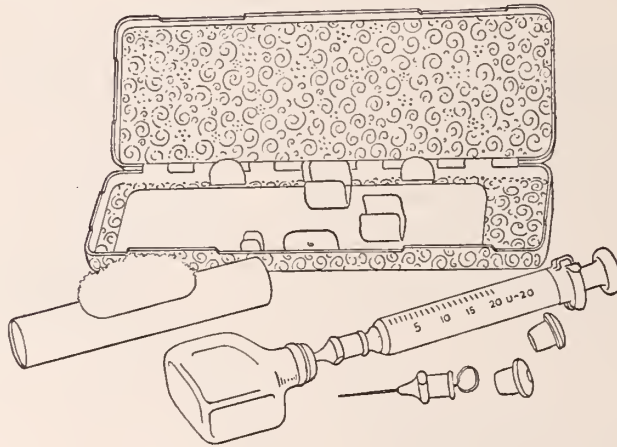
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Maine Medical Journal

The Official Organ of
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Vol. XXV

Portland, Maine, April, 1934

No. 4

Editorials

Medical Leadership in Maine

Perhaps as never before should medical leadership in Maine be encouraged and fostered by local support and recognition. In the past the Medical School of Maine, by furnishing instruction and developing teachers, did much to enhance state unity, a large percentage of our practitioners being graduates of that institution and naturally looking to it for leadership. A little over a decade ago, due largely to the increasing complexity of medical instruction and the growing cost of maintaining a plant of a high level of efficiency, this school was forced to give up its charter. Since that time the ranks of the practitioners have been recruited by graduates of out-of-state institutions who naturally look, to a limited extent at least, to out-of-state leadership. In the past few years there have been developed in Maine several fairly large centers and many smaller ones where excellent medical work is done by men who, wholly, or in part, limit their practices to the various specialties and who have access to splendid clinical material. It is to these men that we must turn for local instruction and advancement in medical matters. They must be encouraged if they are to be expected to continue the excellent work they have done. It is not to be considered for an instant that

out-of-state speakers and teachers should be barred or that a state of provincial isolation be attempted. On the other hand, a policy of depending exclusively on any particular metropolitan center is not conducive to the building of a strong state leadership and is likely to lead eventually to a condition of medical vassalage.

J. R. H.

Method of Planning the Annual Program

The type of medical meeting that interests the greatest number of physicians and permits the greatest number to take an active part is the best. Our present form of state meeting minimizes formal papers and offers a variety of conferences. When it is recalled that there are over forty conferences and eight papers, it is hard to see how any other plan would provide opportunity for so large a number of our members to take active parts in the annual meeting of our State Association.

When it is considered that the membership of our organization contains both general practitioners and specialists, it can readily be seen that, on the whole, set papers should

discuss broad medical and surgical principles affecting all types of practice, historical medicine, medical economics and public health. At our meeting the majority of such papers should be presented by members of our own Association. Essayists from away should be outstanding in their fields and should speak largely on research subjects.

The elective conference scheme presumes that it is better for a physician to address a small group who are interested in a particular subject, where free discussion is desired, than a large but uninterested audience. So many and diverse are the topics offered for selection that a physician must find it difficult not to discover at least four conferences that he would like to attend. A meeting devoted to general papers is of little value to the specialist. Our form of meeting, in addition to offering him conferences in subjects in which he is interested, also in many specialties, offers symposia reviewing outstanding work for the year in their particular fields.

In making up the program for our May meeting, the Scientific Committee has endeavored to select the essayists and conference leaders with due regard for their distribution geographically, according to the medical population, group affiliation, and as to whether or not they have been on a recent program.

G. O. C.

Maine Medical Meeting, 1934 Ladies Welcome!

The meeting of the Maine Medical Association will be held in Bangor, May 27, 28 and 29. The headquarters and exhibits will be at the Bangor House. The scientific sessions will be held at the Memorial Hall, which is just across Main Street from the hotel. The Bangor House rates will be \$4.50, without

bath, per person, and \$5.00, with bath, per person, American plan. Also the Penobscot Exchange rates will be \$2.00 and \$2.50 per person, without meals.

A definite effort is being made this year to provide entertainment for the ladies, and it is hoped that there will be a large attendance. A committee of ladies has been appointed, consisting of the following: Mrs. E. S. Merrill, chairman; Mrs. Henry Knowlton, Mrs. Allan Woodcock, Mrs. E. L. Herlihy, Mrs. James Clement, Mrs. Herbert Scribner, Mrs. John L. Johnson.

All ladies are requested to register upon arrival and receive tags, bearing names and residences. The members of the Hospitality Committee will be known by tags bearing the word "Committee." Some of these ladies will be at the Bangor House throughout the entire session to greet physicians' wives.

Monday morning the following has been arranged: Shopping, drives, cards. Monday afternoon: Theatre parties at the Bijou, and at the Opera House. The management has agreed to make every effort to put on the best show obtainable on those dates. Also, cards in the Ladies' Parlor for those who wish will be arranged at any time. Monday evening: Buffet supper and dance at the Penobscot Valley Country Club at \$1.00 per person probably. For those not wishing to dance cards will be supplied.

Tuesday noon there is to be a luncheon, at seventy-five cents per plate, at the Tarrantine Club with cards following probably. Tuesday evening is the banquet at the Bangor House.

The golf clubs will be open to members of the Association and their ladies during the session for moderate green fees.

Every effort will be made to have each and every lady enjoy herself to the utmost. We will do our best to see that, while the doctors improve their minds, the ladies may improve their opportunities. We hope that they all will come.

J. L. J.

Conferences, Round Table and Partial Program Arranged for the Eighty-second Annual Session

Scientific Session

MONDAY, MAY 28TH, AT 2.00 P. M.

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|---|------------------------------|
| 1. "Pre- and Post-operative Surgical Case," | Dr. P. P. Thompson, Portland |
| 2. "Ectopic Pregnancy," | Dr. M. F. Ridlon, Bangor |
| 3. "Diseases of Musicians," | Dr. S. H. Kagan, Augusta |
| 4. "The Treatment of Cerebrospinal Infections by Open Spinal Drainage, with Report of Cases," | Dr. L. H. Smith, Winterport |

TUESDAY, MAY 29TH, AT 2.00 P. M.

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| 5. "Some Observations on the Treatment of the More Common Forms of Heart Disease," | Dr. W. J. Renwick, Auburn |
| 6. "Health Work in the Public Schools," | Dr. H. H. Cleveland, Portland |
| 7. "The Differential Diagnosis of Breast Tumors," | Dr. Dean Lewis, Baltimore (President of A. M. A.) |
| 8. "Medico-legal Medicine," | Dr. W. E. Freeman, Yarmouth |

Conferences

MONDAY, MAY 28TH, AT 9.30 A. M.

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| 1. "Childhood Tuberculosis," | Dr. Lester Adams, Hebron |
| 2. "Unfortunate Results in Treatment of Fractures and How to Prevent Them," | Dr. E. S. Hall, Portland |
| 3. "Head Injuries from a Neurosurgical and Neurological Standpoint," | Dr. H. Eugene Macdonald, Portland |
| 4. "Dysmenorrhœa," | Dr. A. H. McQuillan, Waterville |
| 5. "The Gall-bladder Stones and Operations," | Dr. H. W. Garcelon, Auburn |
| 6. "X-ray of Chest and Orbit," | Dr. E. S. Cummings, Portland |
| 7. "Cardiac Arrhythmias," | Dr. H. E. Pressey, Bangor |
| 8. "Usual Pre-operative Preparation and Post-operative Treatment in General Surgical Practice," | Dr. N. A. Fogg, Rockland |
| 9. "Eye Injuries," | Dr. W. J. Gilbert, Calais |
| 10. "Sinusitis," | Dr. T. J. O'Sullivan, Portland |

MONDAY, MAY 28TH, AT 11.00 A. M.

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| 11. "Diabetes vs. Renal Glycosuria in Children," | Dr. L. L. Powell, Portland, with Drs. Harry Emery and M. Warren, Portland |
| 12. "Strictures of Urethra," | Dr. Alfred Mitchell, Jr., Portland |



13. "Abdominal Complications in Obstetrics," Dr. H. D. Ross, Sanford
14. "Treatment of Syphilis of the Central Nervous System,"
Drs. F. C. Tyson and F. E. Carter, Augusta
15. "Cytological Studies," Dr. Julius Gottlieb, Lewiston
16. "Concerning Diagnosis in the General Country Practice," Dr. F. H. Badger, Winthrop
17. "Empyema," Dr. T. S. Moise, Bangor
18. "Skin Manifestations in General Disease," Dr. O. R. Johnson, Portland
19. "Uveitis," Dr. A. W. Moulton, Portland
20. "Acute Throat Conditions," Dr. F. T. Hill, Waterville

TUESDAY, MAY 29TH, AT 9.30 A. M.

21. "Feeding of Older Children," Dr. F. P. Webster, Portland
22. "Bone Tumors," Dr. C. H. Rand, Lewiston
23. "Early Symptoms in Mental Disorders," Dr. C. J. Hedin, Bangor
24. "Gynæcology—Endocrine Factors," Dr. Henry Sprincee, Lewiston
25. "Appendicitis," Dr. W. E. Tobie, Portland
26. "Thoracic Surgery—Results of Collapse Therapy in State Sanatoria,"
Dr. G. E. Young, Skowhegan
27. "The Role of Deep Radiation in Cancer and Blood Dyscrasias," Dr. H. E. Peters, Auburn
28. "Meningitis," Dr. Henry Knowlton, Bangor
29. "Significance of Eye Symptoms in Head Injuries," Dr. S. L. Andrews, Lewiston
30. "Focal Infections in Ear, Nose and Throat and Their Relation to Systemic Disease,"
Dr. W. E. Ellingwood, Rockland

TUESDAY, MAY 29TH, AT 11.00 A. M.

31. "Treatment of Chronic Tuberculosis," Dr. F. J. Welch, Portland
32. "Hematuria," Dr. C. H. Jameson, Rockland
33. "Toxemias of Pregnancy," Dr. L. P. Gross, Lewiston
34. "Cervicitis," Dr. J. A. Lethieq, Brewer
35. "Lymphoblastoma," Dr. M. Warren, Portland
36. "Diseases of the Arteries," Dr. R. V. N. Bliss, Bluehill
37. "Points in the Recognition and Management of Certain Affections of the Thyroid
and Parathyroid Bodies," Dr. I. M. Webber, Portland
38. "Congenital Cataract," Dr. M. C. Moulton, Bangor
39. "Some Troublesome Nasal Conditions," Dr. J. L. Johnson, Bangor
40. "The Year's Progress in Pediatrics," Dr. T. A. Foster, Portland



Review Conferences

MONDAY, MAY 28TH, AT 2.00 P. M.

"The Year's Progress in Medicine,"

Dr. E. H. Drake, Portland, and Dr. J. O. Piper, Waterville

"The Year's Progress in Ophthalmology,"

Drs. E. E. Holt, S. J. Beach, Portland, and Dr. H. F. Hill, Waterville

TUESDAY, MAY 29TH, AT 2.00 P. M.

"The Year's Progress in Surgery,"

Dr. E. H. Risley, Waterville, and Dr. F. H. Jackson, Houlton

"The Year's Progress in Oto-laryngology," Drs. H. P. Johnson and G. O. Cummings, Portland

Special Notices

First meeting of House of Delegates, Sunday, May 27th, at 8.00 P. M.

Second meeting of House of Delegates, Monday, May 28th, at close of afternoon session.

Meeting of Editorial Board, MAINE MEDICAL JOURNAL, at dinner, Sunday, May 27th, at 6.30 P. M.

County Secretaries' luncheon, Monday, May 28th, at 12.30.

Ex-presidents' luncheon, Tuesday, May 29th, at 12.30.

Luncheon for Johns Hopkins graduates, to meet Dr. Dean Lewis, Tuesday, May 29th, at 12.30.

Annual Banquet, Tuesday, May 29th, at 7.00 P. M.

Speakers: Dr. W. E. Kershner, Pres. Me. Med. Assn.

Dr. Dean Lewis, Pres. A. M. A.

(Perforation for tearing off.)

To Doctor F. T. Hill,
Professional Building,
Waterville, Me.

I desire to attend Conferences Nos.
(Select four)

In case any of these are filled I desire Nos.
(Select four)

.....M. D.
(Signature)

Fill out and mail to Dr. F. T. Hill, Chairman of the Program Committee.

*Significance of Childhood Type of Tuberculosis

By EDWARD A. GRECO, M. D., Portland, Maine

The National Tuberculosis Association adopted the name "Childhood Type of Tuberculosis" to describe primary pulmonary infection with the tubercle bacillus. The condition is still called by some writers infantile, juvenile, or hilum tuberculosis. The official term is still wanting in accuracy, for it is to be noted that adults show the same response to primary infection with Koch's bacillus, and that children may get the destructive adult type of disease (consumption). The descriptive terms primary tuberculosis of the lungs, or first infection type of pulmonary tuberculosis, as recommended by several phthisiologists, seem more appropriate. In the same manner of speaking, the adult condition may be known as reinfection type of pulmonary tuberculosis, based on the fact that this disease is due to subsequent attacks of the organisms.

The sequence of events in the pathogenesis of childhood type of pulmonary tuberculosis has been established.¹ The first focus takes place in the lung tissue beneath the pleura. Tubercles form and varying degrees of inflammation ensue, depending probably upon the dosage of organisms implanted, and environmental conditions. This perifocal reaction may be severe enough to be of the pneumonic type, but it is not the rule. The usual outcome at the time is a happy one, and it is conceded by workers in this field that practically everyone withstands this primary infection well. The tracheobronchial group of glands draining the pulmonary area of disease are necessarily involved, the bacilli reaching them by way of the lymph stream. Chadwick considers this pathological condition the incipient stage of tuberculosis of the destructive type. To our mind it is potentially dire, since it has been shown in the past decade that adequate reinfection from outside sources or from within raises havoc.

The primary focus usually takes on healing tendencies, and if enough calcification takes place in the center of the caseating

tubercle, a characteristic shadow is noted in the roentgenogram. This is the tubercle as described by Anton Ghon² in 1912, as a result of his classical post-mortem studies. If the draining tracheobronchial group of glands have undergone enough calcification to be opaque to X-ray, and are not hidden by bone or viscera throwing more dense shadows, they, too, will give characteristic appearances in the roentgenogram. The point is that these structures may be involved and not show on X-ray study at the particular time.

As no well-recognized symptoms and no definite signs are the rule in childhood type of tuberculosis, and in so far as lesions may not show on X-ray, the tuberculin test becomes of utmost importance in arriving at a diagnosis. The more we see of this test the more we are convinced that it is, perhaps, the most specific one in medicine. Krause, Baldwin and others have shown that tubercle formation is a *sine qua non* in genuine tissue hypersensitiveness to tuberculin. A positive reaction to old tuberculin means that there is an area of tuberculous disease somewhere in the body. The disease may not be and usually is not of the extent and severity that it makes one ill, but one thing is certain, as shown by follow-up investigations, apparently healthy positive reactors can and not infrequently do fall victims to phthisis. The primary focus may be extrathoracic, of course.

When given properly and interpreted correctly, the intracutaneous test introduced by Mantoux in 1908 is the method of choice. Aronson³ has standardized the procedure very efficiently, and has simplified the matter of tuberculin dilution, and the method of introduction and reading. This test brings out twenty-five per cent. more positive reactors than the Von Pirquet. Its superiority over the scarification method of Von Pirquet is that it admits of proper introduction, and of accurate measurement of tuberculin.

The earlier workers with tuberculin diagnostic tests were convinced, and, in fact,

* Paper read before the Portland Medical Club, October 3rd, 1933. Repeated before the York County Medical Society, October 18th, 1933.

made it dogma, that a positive reaction was of no significance in older children and adults. They noted so many positives in children and adults who were apparently healthy that such a conclusion was, perhaps, a natural if not a logical one. This was in the days when the nicety of roentgenologic technic and interpretation was not had, and before the importance of childhood infection was understood. And so the questions may be asked of what import is this early infection with the tubercle bacillus? What is the significance of childhood type of pulmonary tuberculosis? It is more than of passing interest and academic concern to know, because upon the true conception the proper preventive treatment rests.

There are two schools of thought. One, the more modern, with a background of scientific observation and logical reasoning, which holds that primary infection with the potentially death-dealing bacterium should not be taken as too matter-of-fact, even though the usual immediate results are mild; that it is not a requisite for future well-being as far as protection against consumption is concerned, but that, on the contrary, it marks its victim as one of a great number that may be sick with the destructive adult type of disease later. The arguments of the logicians who preach this gospel are irrefutable. Myers,⁴ after ten years of intensive study on this subject at the Lymanhurst School for tuberculous children, found that infants have an excellent tolerance for tubercle bacilli. He also found that only children with first infection type of tuberculosis develop the adult or destructive type. He concludes rightly enough that the primary or first infection type of tuberculosis is no protection to the child. A group of young adults who reacted negatively to tuberculin, and hence had no first infection type of disease, were noted by Myers. When exposed to tuberculosis they became positive reactors, but did not develop galloping consumption as was once thought. They withstood primary invasion such as infants and younger children do. He opinionates that the longer the first infection type of tuberculosis can be prevented in the human body, the better.

A decade of observation by Stewart⁵ at Lymanhurst brings out these facts. Seventy-

three per cent. of eighty-four children studied with consumption (adult type of tuberculosis) had primary and reinfection type of the disease. Thirty-six of these cases had primary tuberculosis exclusively for various periods up to ten years, and then developed phthisis. Certainly, a safe conclusion to draw here is that primary tuberculous infections do not prevent consumption from developing at some later date. He states that he has never found a second crop of lesions typical of primary disease in a child allergic to tuberculin, and that it is apparent that the human body can experience the benign primary form of the disease only once. His series of cases showed that when new lesions developed in children who had previously reacted to tuberculin, these lesions were characteristic of reinfection pulmonary tuberculosis (phthisis). This work, and the work of Myers and others, indicates that primary tuberculous infections are distinctly detrimental, in that they alter the normal resistance to tuberculosis in such a manner that, instead of again responding benignly, the host acquires serious disease when reinfection occurs.

The other line of thought is the one familiar to us all, including the laity. It conceives that tuberculosis of the first infection type is well-nigh universal. It is this that keeps down the morbidity and mortality from the great white plague, because early infection creates immunity and a good "resistance" against consumption. These writers pointed out that aboriginal races have a high incidence of tuberculosis and a high mortality rate, the reason being that the contact with the tubercle bacillus has been too recent to impart a racial immunity. Their opinions do not seem warranted in the light of the investigations of Crabtree⁶ on Negroes in Tennessee, of Myers⁷ on Negro, Indian and Mexican children, and of Burns⁸ on American Indians. The gist of their findings is that these primitive races live in an environment of bad hygiene, poor housing facilities, inadequate diet, etc., that makes for massive infection and reinfection. Any peoples living under the same condition would have the same morbidity rate. There is no strong evidence to show that the aborigines have any less "resistance" to the disease.

Vaccination with the bacillus of Calmette-Guerin is based on the viewpoint that primary infection is protective. The exponents of this therapeutic idea considered that the only drawback to natural infection with the tubercle bacillus was that the dosage is not controlled, and the virulence of the invading bacterium not known. They administer orally a vaccine of attenuated bovine tubercle bacilli, containing a controlled number of organisms, to children of tuberculous parents before these children are able to get a natural infection. The danger of reinfection is known to these workers, because, if possible, they take the child away from tuberculous environments. To date more than one million children have been vaccinated in France and neighboring countries. This forms one of the largest tuberculosis researches in history. It is too early to base any definite conclusion on this work. B.C.G. vaccination, controlled though it may be, gives these children a first infection type of tuberculosis, and there is ground for fear that they may be as easily susceptible to the inroads of reinfection as children who are primarily infected by chance.

The ideal method to ascertain who has primary tuberculous infection is to survey schools and like groups with the tuberculin test, then X-ray all positive reactors. This should be done by experienced tuberculosis workers, of course. By using this procedure in Philadelphia, Opie⁹ and his co-workers discovered a goodly number of high-grade first infection type of tuberculosis in school children who manifested no illness. Intracutaneous tests on four thousand children elicited the following positive reactions: 37% at five years of age, 70% at ten years, 80% at fifteen years, and 90% at nineteen years. In the less metropolitan area of Massachusetts, Chadwick noted 28% reactors in one hundred thousand tests. He states that various communities gave different percentages of positive reactors, but as groups approaching ten thousand in number were reached, the percentage dropped to around 28%. In larger cities there are nests of tuberculosis to account for larger numbers of positives.

Work done at our¹⁰ clinic with the tuberculin test has not been compiled, but an esti-

mate would place the positive reactors at about 50%. It must be remembered that we examine children who have had, or who are thought to have had, contact with open tuberculosis. If a general survey of schools were made, the figure would be lower, because many non-contacts would be examined. X-raying positive reactors gives us the only insight as to the amount of intrathoracic tissue diseased, and it provides a method of classifying the tuberculosis. This classification would have a bearing on the treatment prescribed. Concerning the tuberculin reactors with little or no X-ray evidence of parenchymatous spread, it probably is not good judgment to dismiss them with a word to the parents or those responsible that the children have been infected, and that it is nothing to worry about. Let us not forget that these children may be reinfected exogenously or endogenously and acquire consumption. It has been the writer's policy not to minimize this situation, although he does not want to be considered an alarmist. Potentially something can happen to these children and so the avoidance of reinfection is stressed. Removal from a tuberculous environment should be done. If non-tuberculous relatives are had this can be arranged at times, otherwise tuberculosis-free foster homes, as recommended by the Lymanhurst group, would be ideal, these homes to be helped by the state if necessary. School and conservative activities may be kept up, but the avoidance of exertive sports and fatigue-producing routines should be in force. Cod liver oil and other vitamins are of value, and heliotherapy is indicated in selected cases. It goes without saying that three good meals daily is most important. Rest even in these mild cases is the chief crutch of support. We have noted that the simple expedient of one-half hour's rest in bed before meals creates an appetite and is productive of gain. A liaison between clinic patients and the homes is best had by the frequent visits of the social worker or health nurse.

The child who has fairly extensive involvement as shown by the roentgenogram needs more intensive treatment. These patients may or may not show indefinite clinical symptoms, as fever, slight cough, inability to gain weight, fatigue and languor. These may

be due to non-tuberculous conditions, of course. Physically, if the tracheobronchial adenopathy has progressed sufficiently, percussion and auscultatory findings may be had, but these are usually very indefinite. The treatment includes all that is recommended for the milder type plus greater periods of rest. The preventorium may be considered, never the sanatorium, where the chances of reinfection would not be lessened certainly. In all cases frequent clinical "check-ups", including X-ray, will give us the best information as to progress.

As in any disease the best treatment is prophylaxis. Control of the spreaders of tubercle bacilli must be enforced if we are going to get anywhere in the prevention of human tuberculosis. Consider that a conservative estimate has it that two million children have childhood type of tuberculosis in this country, all infected by disseminators of the bacteria. Consider that it is out of these two million that the sanatoriums will derive their patients in the time to come. Consider that tuberculosis still kills more children under twenty-one than any other communicable disease, and the importance of control becomes evident. Certification of teachers, nurses, doctors, domestics, anyone in close contact with children, is an excellent thought. All cases of childhood tuberculosis are not picked up in the homes. The class room, the food shop, the hospital, and even the Sunday School, have been reported as sources of infection. That the child can escape infection is shown by the large number of tuberculin non-reactors. That infection is not protective is evident. Then let not the child be infected. Myers draws a discouraging contrast between the accomplishments of the veterinarians and the physician in their respective fields of tuberculosis. By making use of the specificity of the tuberculin test, and slaughtering all positive reactors, the veterinarians have reduced the animal positive reactors to less than one-half of 1% in this country. In England, where only the animals obviously diseased are slaughtered, there are still 40% positive reactors, and it is estimated that 6% of deaths from tuberculosis in man is due to the bovine bacterium. Human tuberculosis workers, on the other hand, have in the past paid

little or no attention to eradication of the disease. Valiant attempts at eradication can be made. Rigid control of those with positive sputums, prevention of primary infection in children as long as possible, and particularly avoiding reinfection in these children, are problems that will some day be worked out. By building plans along these lines the chances are not improbable that in the not too distant future, that enemy of civilization, mycobacterium tuberculosis, will be gone where the woodbine twineth.

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**Undulant Fever*

By A. BROOKS LIBBY, M. D., Gardiner, Maine

Malta fever dates back to the time of Hippocrates and has been prevalent in the countries bordering on the Mediterranean Sea and on the Isle of Malta for many years. Capt. M. L. Hughs, of the British Army Medical Staff, proposed the name of undulant fever in 1879, and in 1913 this was recommended by the International Congress of Medicine held in London, to replace the name of Malta fever. It now exists in India, East and South Africa, North and South America, the West Indies, China and Russia, as well as in the Mediterranean region.

Malta fever in man was first described in the United States by Craig, in 1902. In Europe the relation of the disease in man and in goats had been recognized for a long time, with *Brucella melitensis* as the infecting organism. Craig says: "There are no pathognomonic symptoms of Malta fever. The symptoms observed are so inconstant and confusing that no one of them can be said to be typical of the disease. A differential diagnosis is almost impossible in the majority of cases without the aid of the microscope and the serum test." A multitude of names have hence been used to describe the disease: According to Keefer, "undulant fever or febris undulans" (from the wavelike accessions of fever); Malta, Maltese, Mediterranean, Gibraltar or "rock," Neapolitan and Cyprus fever (from the geographic distribution); slow, mountain, continued, goat fever (in Texas and New Mexico); Mediterranean phthisis (from the bronchitis, anemia and night sweats suggestive of phthisis); Bruce's septicemia, melitensis septicemia, febris melitensis.

In 1918, Evans established the relationship of *Brucella melitensis* causing Malta fever in goats, and *Brucella abortus* causing contagious abortion in cattle. For some time the infectiousness of *Brucella abortus* for man had been suspected, but absolute evidence was not obtainable till 1924, when Keefer described such a case.

Etiology:

The causative organism was first discovered by Bruce in 1886. The name micrococcus melitensis was applied to it, but it is capable of taking on bacilli forms. In 1897, Bang discovered the bacillus abortus. These two organisms later were found to have the morphology and the same cultural and biochemical characteristics. It is now considered that the *Brucella melitensis*, so named in honor of Bruce, and bacillus abortus belong to the same family, but are simply different strains.

The incubation period may be five days to three weeks, but is usually twelve to fourteen days.

The organism practically always enters the human body with the ingestion of foods, and mostly dairy products, especially milk, either goat's or cow's. However, contacts with meats, hides or stock harboring the infection may contract the disease through abrasions of the skin. There is a possibility that a few cases may be contracted through the respiratory tract, as the organism can live about seventy-five days in dust.

Some divide this disease into four varieties:

1. In a typical case the temperature rises step-like, just a little higher on each successive night until it reaches 103° or 105°, not unlike typhoid fever, falling in the morning. Profuse night sweats are characteristic, usually in the early morning. There is little change for from one to four weeks. Then the temperature gradually declines and reaches normal in about two weeks. After a few days there is a relapse. During the interval the patient feels a little weak, but otherwise normal. As the attacks continue the patient becomes anæmic, loses weight, functional heart murmurs develop, and the patient becomes prostrated and extremely depressed.

2. The severe type sets in suddenly—all the symptoms are much more marked—a

* Read before Kennebec County Medical Association, Waterville, October 19, 1933.

severe typhoid-like condition supervenes, and death occurs from basal pneumonia or cardiac failure.

3. Intermittent type—gradual in onset and mild in course.

4. The ambulatory type is still more benign. The patient experiences at times slight fever and may complain of an unaccountable weakness, but the organism is present in his blood, and it may be in his sputum and excreta. Incubation period ten to twelve days, but it may vary from four days to twenty. In typical cases the patient first complains of malaise, chills, headache, backache, muscular pains, dyspepsia, mental depression, insomnia, sweating and general weakness, and a peculiar nauseating odor about the patient cannot be accounted for.

Diagnosis:

This is made by positive serum agglutination, with a time limit of thirty minutes. Blood cultures have been found positive in some cases, but the success of this method demands a special technique and a suitable medium. The organisms may be isolated from blood, urine or feces; intradermal tests may supplement agglutination tests and blood cultures, especially when these tests are negative. Burnet regards it as more reliable than the agglutination test. The intradermal injection of saline suspensions of killed abortus organisms gives specific cutaneous redness. A positive test is characterized by the gradual development of an indurated red area at the point of inoculation within twelve to thirty-six hours.

Differential Diagnosis:

Acute miliary tuberculum, typhoid fever, malaria, infectious diseases. After a week we can usually eliminate typhoid fever, but it is not so easy to differentiate tuberculosis, especially the miliary form. Malaria must be thought of, but undulant fever does not respond to large doses of quinine. Loss of weight is marked—sixty-two pounds in one case—spleen palpable in less than half of the cases. Abdominal pain in first stages of disease has sometimes confused the diagnosis with appendicitis. Skin eruptions often occur

on abdomen and confound it with typhoid fever. Repeated abortions in women have often been thought to be syphilis, but proved to be undulant fever.

Complications and Sequelæ:

As a rule, the most serious complication is the debility it entails. There may be emaciation, profound anemia and rheumatic pains, and such sequelæ as abscess, orchitis, mastitis, parotitis, boils, etc. An attack often leaves a patient with an extreme atrophy of the muscles and in a state of general invalidism, in which susceptibility to T. B. is greatly enhanced.

Pathology:

It has not been definitely known where the principal site of bacterial activity may be situated after infection has gained entrance into the body. The phenomena of the disease are usually explained as due to a chronic septicemia without definite foci of bacterial growth. The symptoms of the disease, also, are so variable that no particular organ or tissues come naturally under suspicion. It would seem reasonable to suppose that in the intestinal tract might be found a nidus of the infection if the entrance of the bacteria in many of the cases, and hypothetically of all, is by way of the mouth. Pathological studies, however, have shown but little change from what might be expected in any severe feverish condition, either in the intestinal tract or elsewhere. One recent book dismisses the whole subject of the morbid anatomy of the disease with these words, "There is no special pathology." That there may be definite intestinal lesions in the disease in spite of the absence of any pathological data as yet furnished is possible from the nature and course of the malady.

Most autopsy material has come from the malignant type of cases, comparative small in number, which terminates fatally within a short time after infection has taken place. Those patients who have symptoms for many months practically always recover. Hence an hypothesis may be entertained that the body defences in such cases have had chance to repair any lesions that may have appeared and existed for a varying period of time without leaving appreciable scars.

In a report by Lt. L. Bonfield, published in the *Journal in the Royal Army Medical Corps* for August, 1926, he cites two cases reported by Hughs in a series of autopsies that showed ulceration of the intestine of such a type that the question of typhoid fever could be raised. He also quotes Bruce as describing four ulcers in a single case, and that several cases had come under his observations having more or less profuse hemorrhage from the bowel, which were, clinically, not typhoid and whose sera did not react to enteric, but did to Malta fever.

The abdominal tenderness and distention so frequently met with in enteric fever is also common in severe undulant fever. A special case reported by this author died twelve days after entering hospital. At autopsy eight ulcers were found in the small intestine between eighteen and thirty-six inches from the ileocecal valve. Pure cultures of micrococcus melitenses were grown from the spleen and from the mesenteric glands.

Case History:

N. P., male, age 35, farmer, has not had any previous serious illness. Formerly a marine engineer. In 1919 went to Uruguay and was in Montevideo for two weeks. Had a fever for three weeks on way home. Sugar reported in urine for some time in 1927. Began to feel badly Nov. 15, 1932. First symptoms were light head, loss of appetite and weight. Later he had fever and sweating spells at night, with chills. He had a very badly coated tongue and a fetal odor to his breath and was very constipated. Some days there would be no fever, and often in morning would feel good for a time and in two hours feel mean. Hearing was affected and eyesight bad, not being able to read even with glasses. He complained of a dull ache through eyes. Color was pale. There was a rapid pulse even when temperature was normal. He had a feeling of faintness, almost amounting to syncope, when he tried to work. He complained of having cramps in elbows, fingers, hips, knees. His Widal test was negative, but agglutination test for the undulant fever was positive. The milk supply of the family was suspected and tests were made, which, as far as I know, were negative, but milk from

that source was sterilized before using thereafter.

Treatment:

In searching the literature we find treatment a negligible item. This may be divided as follows: (a) Symptomatic; (b) Chemotherapy, *i. e.*, with an intravenous injection of mercurochrome and gentian violet (few successful reports); (c) Vaccine therapy. This patient responded to vaccine treatment.

In Tacoma, Washington, Dr. Queoti is using whole blood transfusion, especially in anæmic patients and those carrying a high temperature. He gives a long series of cases treated by transfusion and they remain free of recurring fever after a few treatments. One case was so bad, and it responded so nicely, I will mention it. This woman had been treated by vaccine and symptomatic treatment but seemed destined to die. She had uterine hemorrhages, bleeding from gums, macular petechias, ghastly sweats, marked arthralgia and temperature averaging 105°. The author states that after two transfusions there was a remission of fever, her health returned, and the symptoms of the disease disappeared. He says: (1) Immunity against this disease by humans must be quite high. If not, with the great number of animals now infected there should be far more human cases. (2) The results obtained by rapid whole blood transfusions can only be explained on the basis of a passive immunity obtained from the donor. Theoretically, the ideal donor should be a patient who has recovered from the disease.

As to the prevalence of the disease we notice that in 1925 there were only 24 cases reported in the United States, and 1400 in 1930. The number of cases now reported runs into the thousands. There is a marked preponderance of cases among males, the ratio being about 30 to 1. As to age incidence, the greatest number occur in middle-aged adults. There are only a small number in children under fifteen years.

The Health Section of the League of Nations has found undulant fever to be one of the most important problems at the present time. The wide prevalence of contagious abortion in cattle and the apparent infre-

quence in persons have led many to agree with Dr. Huddleson, who suggested that there have been and now may be many cases of the disease which are not diagnosed. The lack of pathognomonic symptoms makes this probable. It is urged that this disease simulates typhoid, para-typhoid, influenza, acute articular rheumatism, tuberculosis, and certain forms of malaria. Because this is true, Evans has pointed out that "There is no disease in which the physician is more dependent upon the laboratory findings for a correct diagnosis," and has advised that more examinations for undulant fever be done in our general practice. As the greater proportion of undulant fever cases occur in rural districts, or small villages or cities, we should be on the alert. Taking into consideration the fact that undulant fever is conveyed by the milk, that a large number of herds of cows are infected with the *B. abortus*, and that there is no attempt by the authorities to stamp out the disease by treatment among those affected, that the milk that is known to be affected is not restricted but allowed to be delivered to all classes and hospitals, it is surprising that this disease is not prevalent among children, especially infants. Among over two hundred cases collected by Carpenter and King there were only two cases in children under six years. In the Children's Hospital in Boston there was only one positive reaction in 250 children serums. Many authorities believe that infants are apparently immune from the disease. This is questioned by Guest, of Cincinnati, Ohio, as he states that there are many cases among nurslings which pass undiagnosed, both because of failure to make proper laboratory examinations, and because

of difficulty in recognition of clinical symptoms in infants. He says: "It may be that, while not often producing an acute disease in infants, *B. abortus* may be a frequent cause of milder acute and chronic illness in infants who drink raw milk, and this agent may be responsible for some forms of mild generalized lymphadenitis, splenic enlargement and anemia, the cause of which we so often fail to understand."

Manson states that, of all infections, undulant fever is the most easily acquired in the laboratory from handling cultures. The bacillus is not killed by cold or desiccation.

Conclusion:

- (1) Undulant fever infection is far more common than generally thought.
- (2) It is spread by milk, by contaminated hands, and excretions of infected patients.
- (3) It simulates other infections, has no pathognomonic symptoms and can only be differentiated by agglutination test.
- (4) Symptomatic treatment is of little avail, while vaccine and blood transfusions is our mainstay.

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*A Case of Thyrotoxicosis

(With Round Table Discussion)

Edited by JULIUS GOTTLIEB, M. D., F. A. C. P., and CHARLES STEELE, M. D.

This patient is a 29-year-old, married white automobile salesman complaining of progressively increasing nervousness, irritability and fatigability. Five months ago he first observed that his shirt collars were be-

coming uncomfortably tight and that there was a symmetrical enlargement anteriorly on each side of his lower neck. He became aware of increasing prominence of the eyes four months ago. In addition, since onset of

* Case Record—Central Maine General Hospital.

the present illness, nervousness, dyspnea on exertion, palpitation of the heart, muscular weakness, easy fatigability, irritability and frontal headaches have become prominent symptoms. The patient had not experienced increased sweating or dislike for hot weather and had not noticed loss of weight or consumption of larger amounts of food.

His past history is essentially negative, having had no serious illnesses or operations. Habits are good. Patient states that he has always been inclined to be restless, nervous and "high strung." His family history is negative for thyroid or glandular disorders. His marital history is negative; his wife and children are well. His home life was congenial and satisfactory. His financial problems are somewhat difficult.

Physical Examination:

Patient is a well developed and nourished middle aged male, in no obvious pain or distress. He was nervous, restless and continually moving about in bed. There is a coarse tremor of the hands, which were moved almost continuously. Due to the prominent eyes and the wide palpebral fissures the patient's general facial expression was that of fright or fear.

Positive findings included puffiness of the upper lids, exophthalmus and difficulty in convergence. The isthmus and both lobes of the thyroid were symmetrically enlarged, firm, smooth, discreet, each lobe measuring 6 cm. by 3 cm. A marked pulsation was felt over the gland and a bruit was heard on auscultation. The heart was rapid, regular, normal in size and shape. Sounds were of good quality. A loud blowing systolic murmur was heard at the apex and in the left axilla. Lungs and abdomen were negative. His skin was warm and his palms moist. There was a coarse tremor of the tongue, hands and feet. Reflexes were equal and active. There was muscle weakness, especially of the extension group in the legs. Babinski, Shattuck, Oppenheim, Gordon, Kernig and Rhomberg signs were negative.

Chart showed normal temperature. Pulse rate of 120 to 130 at rest. Respirations, 25 per minute.

Laboratory Findings:

Basal metabolism rate was plus 80 (one reading).

Complete Blood—Hemoglobin,	85%
Erythrocytes,	5,800,000
Leukocytes,	10,200
Neutrophils,	55
Lymphocytes,	41
Endothelials,	3
Eosinophils,	1

Urine negative except for SPT of albumin.

Admission Diagnosis:

Hyperthyroidism (Graves' disease or exophthalmic goiter).

Question: What is the present classification of thyroid pathology?

Dr. Gottlieb: The following appears to be a satisfactory summary:

Benign tumors:

1. Primary hyperplasia.
2. Endemic goiter or multiple colloid adenomatous goiter.
3. True adenoma.
 - a. Embryoma.
 - b. Fetal.
 - c. Simple.
 - d. Colloidal.
 - e. Papillary cyst.
4. Thyroiditis.
 - a. Acute.
 - b. Chronic.
 - c. Advanced (Riddell's struma).

Malignant:

1. Carcinoma.
 - a. Adenocarcinoma.
 - b. Small cell carcinoma.
 - c. Papillary adenocarcinoma.
 - d. Giant cell carcinoma.
 - e. Adenoma becoming malignant by rupturing into blood stream.
2. Sarcoma.
 - a. Fibroid.
 - b. Occasional lymphoma.

Question: Should a non-toxic adenoma be removed?

Dr. Lahey: Adenomas are potentially malignant and when a definite diagnosis of malignancy is made it is often too late, hence I advocate the removal of adenomas.

Question: How can one differentiate Riddle's struma from hyperthyroidism?

Dr. Gottlieb: Pathologically Riddle's struma presents a very pale, hard, partly encapsulated structure resembling fibrosarcoma, and on cut sections no colloid is found. On microscopic examination it shows a lymph infiltration fibrosis, with

practically complete absence of gland tissue. It is not easily confused with toxic goiter.

Question: Of what value is X-ray therapy?

Dr. Lahey: Too much time is lost in evaluating results. Generally speaking, the question of dosage is difficult and the end results are dubious. In view of our present surgical knowledge there is no second choice.

Question: In several of these cases presented to-day you advise immediate surgical interference on the basis of possible toxic crisis. What factors would precipitate such an event?

Dr. Lahey: Any acute infection, vomiting, or onset of diarrhea from any cause might precipitate such a crisis. It would be difficult to control. In this particular case an event of that sort would precipitate a very grave prognosis, hence, whenever a definite diagnosis of hyperthyroid is made and surgery is decided upon, it should be performed as early as possible. In this case I believe the thyroidectomy should be performed in two stages, because of the marked toxicity at the present time.

I would like to call your attention to the puffiness as well as the lid lag of the upper eyelid. You will also observe the characteristic myosthenia. The cardiac muscle is similarly involved, as are the striated musculature elsewhere.

Question: Is high basal metabolism always necessary for the establishment of a diagnosis of hyperthyroidism?

Dr. Gottlieb: Dr. Means has recently pointed out in his so-called iodine test that hyperthyroidism may exist with a relatively low basal rate. These cases, however, show definite reduction on the administration of iodine, which, when discontinued, results in the rising again of the basal rate to its original level. For example, the basal metabolism rate of 15 may indicate a thyroid toxicosis if, on the administration of iodine, the rate drops to the level of five or thereabouts, and on discontinuation of iodine rises again to the original 15 or perhaps higher. Hence, where other symptoms indicate thyroid toxicosis, in the absence of the expected elevation of basal rate, the iodine test is of value. I would like to emphasize the importance of repeated basal rates, and that one determination should not be relied upon, as there are too many factors influencing the results oftentimes, when only one examination is performed.

Question: Of what value is prolonged iodine treatment in exophthalmic goiter?

Dr. Higgins: In a recent report by Dr. Williard Owen Thompson, *et al.*, it was established that patients with severe exophthalmic goiter rarely show more than temporary improvement during the prolonged administration of iodine. Frequently the disease becomes more severe than before the iodine was started.

Question: What percentage of adenomas become malignant?

Dr. Lahey: Dr. Clute reports that 90% of thyroid malignancy rise on the basis of previous existing adenomas. There are relatively few clinical findings by which an early malignant degeneration in a thyroid adenoma can be distinguished. Marked firmness and fixation of adenomas are suggestive of malignant changes. The most serious types of thyroid malignancy are those that rise as a diffuse, rapidly spreading process in the thyroid gland, and which are in many instances unrelated to the presence of any adenoma in the gland. In such cases there is a rapidly growing tumor which early metastasizes to the adjacent lymph nodes and to the lungs.

Question: How are the usual thyrotoxic patients prepared for operation?

Dr. Steele: A careful medical work-up is done, which includes a complete history, physical examination and repeated basal metabolism determinations. If there is sufficient evidence to justify a diagnosis of hyperthyroidism the patient is prepared for operation. He is kept in bed at complete mental and physical rest. Lugol's solution, minims 10, is administered T.I.D. for a period of 10 days to two weeks, which is the time generally required to reduce the elevated basal metabolism to the lowest possible point, and, therefore, is the time best suited for operation. Iodine therapy cannot be continued for an indefinite length of time before operation is undertaken, since the patients become iodine fast and the basal metabolism rises again. Consequently, it is not wise to begin iodine administration in thyrotoxic patients until the surgeon has been called in to see the case and has concurred in the diagnosis, for it is the surgeon's responsibility to determine the optimum time for operation and to perform the operation.

Question: If there is cardiac irregularity such as auricular fibrillation should that be treated before operation?

Dr. Renwick: If auricular fibrillation exists, the patient may be given quinidine before operation in an effort to restore normal rhythm. However, the prospect of returning normal rhythm is poor while thyrotoxicosis exists. In about half of the cases normal rhythm returns after the operation. Of the cases in which the arrhythmia persists, quinidine in suitable doses will restore normal rhythm in perhaps half of this series, in the other half of the cases which are resistant to both operation and quinidine, digitalis may be used as a permanent daily ration to control the ventricular rate.

Question: If there are signs of cardiac decompensation, what should be done before operation is undertaken?

Dr. Steele: The patient should be put to bed and an attempt made to get the patient compensated.

If there is arrhythmia, digitalis and quinidine should be tried, as Dr. Renwick has just pointed out. In the presence of edema, fluids should be limited and diuretics tried. Unfortunately, again, these measures are too often not successful until the high metabolic rate has been lowered.

Question: How should thyrotoxic patients with cardiac involvement be treated?

Dr. Fahey: The treatment must be primarily directed toward partial surgical removal of the gland in case of diffuse hyperplasia, or removal of the adenoma when that is responsible for the toxic symptoms. In none of these cases does the cardiac condition make operation contraindicated, for in a surprisingly large number of cases the cardiac disability is much decreased following operation.

Question: Are there any characteristic murmurs?

Dr. Renwick: There are no characteristic murmurs in the thyrotoxic state, but in long standing cases auscultation reveals a harsh and often superficial systolic murmur, loudest in the second and third interspace to the left of the sternum. White believes this to be a functional pulmonary murmur.

Question: What are the cardiac symptoms in thyrotoxicosis? Is anginal pain common?

Dr. Higgins: Tachycardia, palpitation and shortness of breath are the symptoms complained of most frequently. In older patients, or in those who have been long in the toxic state, anginal pain is not an infrequent complication.

Question: How can one differentiate heart symptoms in mild or early cases of thyrotoxicosis from those complained of in effort syndrome or neurocirculatory asthenia or in psychoneurosis?

Dr. Steele: Differentiation may be almost impossible if the basal metabolism rate is near the border line and there are not other signs such as exophthalmus or enlargement of the thyroid gland. A very helpful point is the fact that the pulse rate in thyrotoxicosis does not drop during sleep, which it does in cases of psychoneurosis and other nervous disorders.

Question: Is there an increase in the blood pressure during the thyrotoxicosis state?

Dr. Steele: The pulse pressure is generally increased as a result of a rise in the systolic pressure to an average level of 140-150 mm. of Hg. without a corresponding rise in the diastolic pressure, consequently one finds the pulse full and strong.

Question: What are the electrocardiograph changes in thyrotoxicosis?

Dr. Renwick: There are no characteristic electrocardiograph findings in thyrotoxicosis. The rate is usually increased, but this varies considerably. Paroxysmal auricular fibrillation may be found in the early cases. Permanent fibrillation is found oftener in the cases of thyrotoxicosis of long standing. Premature beats are seen often. In the

severe cases one may see increased amplitude of the T waves. These return to normal after operation.

Question: Are there E.K.G. changes in hypothyroidism?

Dr. Renwick: The T waves are absent or inverted in all leads. These are pushed up to normal again by adequate doses of thyroid. This is a very constant finding and is a reliable guide in following the thyroid therapy. There may be decreased amplitude of the QRS complex, but this is not characteristic, for it occurs in old people with chronic myocarditis. The rate is generally slow in contrast to the rapid rate found in the thyrotoxic state.

Question: What are the roentgenological findings in hyperthyroidism?

Dr. Cunningham: A substernal enlargement of the gland may be visualized on a radiogram. Enlargement or dilation of the heart will be seen, but this is not of diagnostic significance unless accompanied by other signs of hyperthyroidism. In toxic cases that are fluoroscoped one often finds an increased forceful apical impulse and a rapid rate.

Question: What is the mechanism of cardiac toxicosis?

Dr. Steele: The underlying cause of this type of heart disease is certainly the result of an abnormal secretory activity of the thyroid gland, but opinion is at variance regarding the exact mechanism whereby this type of cardiac disturbance is produced. White (1) believes that increased body metabolism or a specific stimulating action of the thyroid secretion on the heart itself are the more likely of the possible theories. Christian (2) emphasizes the element of cardiac over drive in thyrotoxicosis incident to the raised metabolism as shown by increased blood flow. He cites the foci of necrosis in the heart muscle that have been observed in some patients dying of acute hyperthyroidism as evidence of an additional toxic damage to the myocardium. After analysis of a large series of cases of thyrotoxicosis with cardiac complications studied at the Lahey Clinic, Hurxthal (3) concludes that in thyrotoxicosis there is a specific excitatory effect on the heart, and that this, more than increased work from circulatory demands, produces failure in a heart weakened by previous cardiac disease, or by degenerative processes of age, or by unrecognized myocardial debility.

Dr. Gottlieb: Dr. Maurice Dionne has recently published a paper which deals with the toxic effect of blood serum in hyperthyroidism on cardiac muscle fibers.

Question: What are the pathological changes in the heart in thyrotoxicosis?

Dr. Gottlieb: Definite and characteristic pathological changes in the heart have not been demon-

strated. The weight of the heart generally does not exceed 400 grams, but rarely may be as much as 500 grams. A few acute cases have shown necrosis of cardiac muscle. The endocardium and the pericardium are not damaged in thyrotoxicosis. Pericardial effusions are absent.

Question: What would one expect to find on examination of the heart in cases of thyrotoxicosis with cardiac involvement?

Dr. Renwick: Inspection and palpation show a

rapid and vigorously acting normal or only slightly enlarged heart, unless auricular fibrillation has persisted for a considerable period, when the heart may show considerable enlargement. The pulse rate averages 100 to 120 at rest. In the beginning the rhythm is generally regular, but as the disease progresses, auricular fibrillation may occur. In the beginning it is generally paroxysmal in type, but as the toxic condition becomes more chronic, fibrillation may become permanent. Premature beats are commonly found.

Report of Committee on Memorials

In accordance with the usual agreeable custom, the Committee on Memorials has approved the names of five members as eligible for the "50 year medals."

The candidates are as follows:

Roscoe G. Blanchard, Dover, N. H.

Leon L. Hale, South Portland.

Albert P. Heald, Thomaston.

Charles A. Moulton, Hartland.

James S. Sturtevant, Dixfield.

Sincerely yours,

THOMAS A. FOSTER, M. D.,
Chairman.

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The President's Page

TO THE MEMBERS OF THE MAINE MEDICAL ASSOCIATION:

To those who follow current events and the editorials of the JOURNAL in the American Medical Association, to those who are carrying the ever-increasing burden of the non-paying patient and to those who try to look into the future, in the light of present-day conditions, it must be evident that a radical change is taking place in the relationship of the physician to the general public. These manifold problems can be worked out by coöperation of organized medicine with the public. There are those who wish to force an abrupt revolutionary and radically different set-up than at present exists. There are also those who will not think of any change and maintain the necessity of a continued status quo of the past years. It would seem that either of these arbitrary stands is a mistake. We must expect some change, prepare ourselves for it, and work to make that change as little harmful as possible to medicine as a whole. It is to be hoped that the next House of Delegates will take some action, either by appointment of the proper committee or otherwise, in order to give this serious question the study that it will need before any progressive action can be taken.

The House of Delegates should also discuss the feasibility of continuing clinical sessions under the auspices of the Association. These sessions can and will give us the newer methods of diagnosis and treatment, they will teach us the advantages of coöperation and coördination in the handling of patients and will keep us abreast of the times in clinical medicine. Dean Lewis, President of the American Medical Association, in a paper in the JOURNAL of March 31, 1934, says: "During the past few years, emphasis has been laid on the laboratories. This was necessary because such rapid strides had been made in biochemistry, biophysics, bacteriology and the histologic examination of tissue. The laboratories have been obtained and now I believe more stress should be laid on the *clinic*."

It would seem that improvement in clinical technique will, in the immediate future, be stressed. Clinical sessions of our Association will accomplish a desired improvement in our clinical work. Medical research is out of the question in a state so essentially rural as Maine. If we concentrate upon the clinical, and if we encourage our centers by our attendance at clinics, we will not only benefit ourselves and our patients, but will do our part for the advancement of the profession. Whatever the activities of the Association may assume in providing opportunities for continued clinical training of the physician, it is manifest that some effort should be made to bring a greater number of physicians into contact with hospital facilities. Each can profit by the training and experience of the other. Dean Lewis has said "that coöperation should replace unrestrained competition" in medicine. That result can best be accomplished by bringing the greatest number of practitioners together in clinical work.

W. E. KERSHNER.

Abstracts

"Management of Chronic Sinus Disease"

Ferris Smith

Archives of Oto-laryngology, February, 1934.

This very comprehensive article is a plea for external operation on the fronto-ethmo-sphenoid sinuses, where radical, or, as the author puts it, "complete" operation is indicated. Undoubtedly many of the failures in the management of sinus disease are due to the attempts of rhinologists to handle these conditions by intra-nasal procedures, which so often fail to produce results. The handicap of working more or less blindly without benefit of direct vision and the necessity of "playing safe" results often in leaving diseased tissue in the ethmoid region. Too often one tries by post-operative treatment to accomplish what should have been done in the operating room. The author feels that we should discard the term "radical," which has been the source of much prejudice, and substitute "complete operation." He outlines the technique as developed by Lynch and by Sewall, with certain modifications of his own. The article is nicely illustrated by drawings, showing the steps in the operation.

F. T. H.

"Recent Advances in the Physiology of Hearing"

McNally

Archives of Oto-laryngology, February, 1934.

Recent work has shown that the higher forms of fish are able to hear. The organ probably concerned with hearing is the saccule and the lagena. The saccule has no vestibular function in fish, frogs and the rabbit. In man, of course, the cochlea is the organ of hearing. The basilar membrane is the most likely resonating mechanism for resolving the complex sounds into their simple constituent harmonic components. The apical part of the cochlea is concerned with the perception of tones of low frequency and the basilar part with those of high frequency. The resonance theory of hearing, or some modification of it, is probably correct. A fusion of impulses from the basilar membrane probably takes place in the acoustic analyzer, the nucleus of which is in the temporal lobe. Bone conduction, as generally tested, may be misleading, due to masking from noise in the ordinary room, which raises the threshold for perception in the normal ear. Lesions of the middle ear in early childhood cause a loss in high tones, rather than lower tones. Tests of hearing are of little value in detection of early otosclerosis, because involvement of the auditory apparatus may be a relatively late phase of the disease.

F. T. H.

"Histopathology and Clinical Interpretation of Experimental Sinus Disease"

Fenton

Archives of Oto-laryngology, February, 1934.

This is a résumé of experimental work done on cats, in which frontal sinusitis has been produced experimentally. The author finds that accurately regulated diets of varying chemical and vitamin contents have little or no effect of changes from acute to chronic sinusitis. Treatment with Roentgen rays seems helpful in membranes containing many lymphocytes and promote histiocytic response and fibrous healing in the animals. It is ineffective in human membranes. Calcium therapy in humans seems to reduce the edematous membranes, favors phagocytosis and increases the accumulation of plasma cells and fibrosis. Irradiated oil is useless in the treatment of sinusitis. Intradermal vaccination is useless in chronic experimental sinusitis, although seeming to produce areas of local acute exacerbation.

F. T. H.

"Parenteral Liver Therapy in Pernicious Anemia: Observations Covering Two Years of Continued Use"

By JOSEPH E. CONNERY, M. D., and LEONARD J. GOLDWATER, M. D., New York City

Annals of Internal Medicine, Vol. 7, No. 9, March, 1934.

Thirty-eight patients with pernicious anemia, some of whom had been receiving other forms of therapy and who were in a state of remission, and others who had received no previous treatment, were treated parenterally with liver extract for periods ranging up to two years. At first they received liver extract weekly, and if, at the end of six months, their conditions were good, as evidenced by absence of symptoms, hematological and neurological examinations, the injections were given every second week. At the end of the second six months, if their condition was satisfactory, injections were given every three or four weeks. In the greater majority of cases the red cells remained around 4.5 million, and in twenty-one of the cases the hemoglobin values were greater than 13 gm. per 100 c. c. of blood. Seventeen had hemoglobin values between 10 and 13 gm. per 100 c. c. of blood. Clinically all cases remained in a satisfactory condition. In nearly two thousand injections there were neither severe reactions or infection.

J. R. H.

"Tumors of the Parotid Gland"

Stein and Geschickter

Archives of Surgery, March, 1934.

The article reviews 241 cases of tumor, excluding infection, from the Johns Hopkins Hospital from 1888 to 1931. Ratio of parotid neoplasm, 1 to 208; 17.4 per cent were malignant; age from 8 to 80 years. Average duration of benign group was eight years, of the malignant group, about four years. Pathological picture remains confusing. Slow growth and slow progression of symptoms characterize benign tumor. Adherence to skin or deeper structures constant clinical sign in malignant group. Discomfort rather than pain occurs in benign group, whereas sharp radiating type of pain is frequent in the malignancies. Salivation not observed. Benign group of firm consistency, rubber-like, circumscribed unattached; malignant usually were diffuse, variable in consistency. Enlargement of cervical lymph nodes favors diagnosis of malignancy. Benign group occurs earlier in life, three out of four between 20 and 45 years of age; two out of three of the malignant group from 45 to 65.

Pathology is discussed in detail, benign mixed tumors, carcinoma; basal cell type of carcinoma confused with round cell sarcoma. Mixed tumor explained on the basis of invasion of embryonic glandular tissue (unencapsulated) from adjacent cartilaginous structures.

Differential diagnosis discussed, infectious parotitis, lymphadenopathy, salivary calculus, Mickulitz syndrome, actinomycosis, tumors of jaw and antrum, peritonsillar and facial abscess.

Treatment was by (1) curettage; (2) enucleation; (3) complete excision; (4) irradiation by radium or röntgen ray. "Both surgical intervention and irradiation have their place in the treatment of these tumors. Small benign mixed tumors are best treated by complete excision with the knife, care being taken to preserve the facial nerve. The malignant tumors should be irradiated first and later excised if they become operable and freely movable, otherwise palliative irradiation should be continued. Following the excision in operable cases, interstitial irradiation may be applied to the tumor bed."

This is a valuable contribution on the subject.

C. H. J.

Notices

Maine Medical Association Meeting Scientific Exhibit

Institutions and individual physicians are requested to present pathological specimens, photographs, and instruments of interest for the Scientific Exhibit at the annual meeting to be held in Bangor. Communications regarding these exhibits should be addressed to Dr. Julius Gottlieb, Lewiston, Maine, in order that space may be arranged for such displays.

Reports of Committees and Delegates

According to the *By-Laws*: Chapter VII, Section 2. "All reports of Officers, Committees, and Delegates shall be published the month preceding the Annual Session of the Association and these reports must be in the hands of the Secretary sixty days before the Annual Session." Please co-operate by handing in to the Secretary these reports before April 23rd.

American Association on Mental Deficiency

The annual meeting of the American Association on Mental Deficiency will be held at the Hotel Waldorf Astoria, New York, May 26, 27, 28 and 29, 1934. The Saturday session, May 26th, will be given over to the sociological, psychological and the special educational aspects of the problem, in order that local social workers and school-teachers may have an opportunity to attend without interfering with their regular duties. The Tuesday afternoon session will be a conjoint meeting with the American Psychiatric Association. Data as to the program may be obtained from the Secretary, Dr. Groves B. Smith, Godfrey, Ill.

The American Association for the Study of Goiter has issued a tentative program of its coming meeting, which will be held in Cleveland, Ohio, June 7, 8 and 9, just preceding the A. M. A. meeting. This program includes names of many well-known men in the United States and Canada interested in the subject of goiter. A postal card to J. R. Yung, M. D., Corresponding Secretary of the Association, Terre Haute, Ind., will bring you a program well worth your attention, which is too long for our column to print in full.

County News and Notes Cumberland

Portland Medical Club

The regular monthly meeting of the Portland Medical Club was held at the Columbia Hotel on Tuesday evening, March 6th, at 8.00 P. M. Dr. John Hamel, who presented the paper of the evening, chose for his subject, "Diabetes Mellitus."

Dr. H. Eugene Macdonald and Dr. Donald H. Daniels were elected members of the Club.

ALICE WHITTIER, M. D.,
Secretary.

Kennebec

The meeting of the Kennebec County Medical Association was held at the Augusta General Hospital, in Augusta, Thursday afternoon and evening, March 15, 1934.

A short clinical session was held at 6.00 P. M., which was presided over by Dr. M. A. Priest.

Clinical program:

Dr. Samuel H. Kagan presented two cases:

1. "A Fracture of the Tibia, Treated by Side Splints and Pillow, with Early Massage and Manipulation."

2. "A Case of Appendicitis."

Dr. Richard H. Stubbs, "A Case of Acute Appendicitis in a Woman Twenty-four Years of Age, Five Months Pregnant, Complicated by Gallstones."

At 6.30 dinner was served at the hospital.

7.30, business meeting. The minutes of the last meeting were read and approved.

Remarks by Dr. George H. Coombs, on "Tularemia, Psittacosis, and Amebisis (Amebic Dysentery)."

The following papers were read:

"Lead Poisoning," by Dr. L. D. Herring, of Winthrop.

"The Management of Some Abdominal Emergencies," by Dr. Carl H. Stevens, of Belfast.

Dr. G. A. Coombs, of Augusta, spoke briefly relative to those conditions.

These papers were very well prepared and instructive, and brought out many interesting points. Both papers brought out a great deal of discussion.

There were thirty-one members present.

FREDERICK R. CARTER, M. D.,

Secretary.

York

The York County Medical Society held a quarterly meeting April 4th. at the Webber Hospital, Biddeford. After a 1.00 o'clock luncheon, the business meeting was held. Dr. E. F. O'Gara, of South Berwick, was elected to membership. It was voted that the October meeting be held in Sanford, with a clinic in the late afternoon, dinner, business and scientific meetings in the evening.

Dr. E. R. Blaisdell, of Portland, gave a very interesting talk on "Diabetes," and Dr. Thomas Foster, of Portland, talked on "Children's Diseases." Much discussion and many pertinent questions followed these papers.

Dr. E. W. Gehring, President-Elect of the M. M. A., was a guest at the meeting and spoke a few words on the Annual Meeting and Malpractice Insurance. Miss Rebekah Gardner, Secretary-Treasurer of the M. M. A., was also present and urged the York County members to attend the May annual session.

Twenty-three members were present.

Necrology

Clarence Atwood Baker, Portland, 1852-1934

Our highly respected comrade in medicine was the son of John Plummer and Abbey Williams Baker, of South Newcastle, and was born January 3, 1852. After passing through the academic courses at Lincoln Academy, he was a student at Bowdoin College, where he was graduated A. B. in 1878, and then studied four years in the Medical School at Bowdoin, graduating M. D. in 1882, one year of this period being passed in medical studies abroad, at London, Edinburgh, Berlin and Vienna.

Returning from abroad and finishing his course at Bowdoin, he settled in Portland and practiced many years at the east end of the city. He was devoted to the schools in that section of the city, and a devoted supporter of the St. Paul's Episcopal Church and the Portland Public Library. He soon enjoyed an excellent general practice, was an active member of the county and state medical societies, and he was an active local politician. He spoke well at meetings when a paper was read that attracted his attention, but he did not write many of his own thoughts or clinical cases.

He was devoted to Masonry and belonged to various lodges of similar societies. During the great war he served faithfully as medical examiner, his services being recommended by those in authority.

Dr. Baker was married, first, to Mary A. Whitman, who died in 1917, and in 1918 he married Miss Owen, who survives him. He died March 20, 1934, after a short illness.

Willis Leroy Hasty, Norway, 1876-1934

Dr. Hasty, the son of David and Louise Hasty, was born in Jackson, Maine, December 12, 1876, went through the schools and high school of the village and completed a course of academic four years at the Maine Classical Institute at Pittsfield, Maine. He studied medicine privately with a physician

at Hampden, and went and completed a course of four years in a medical course in the Medical School of Maine in 1908. He then practiced for ten years in Hampden, Maine, Sullivan five years, 1918-1923, and finally in Norway, where he obtained a fine reputation for the rest of his life. He died in January, 1934.

He is survived by his widow, who was Miss Sadie Bartlett, of Jackson, Maine.

J. A. S.

Louis Bayard Marshall, Portland, 1882-1934

After a failing and long-drawn-out illness of several months, Dr. Marshall, one of our busy practitioners with children, died on Good Friday, March 30, 1934. He had been ill all winter, but within the last few weeks his health rapidly declined, and he died at the early age of fifty-two. He was born at Cambridge, Massachusetts, April 19, 1882, the son of Robert C. Marshall and Mattie Anderson, of Thetford, Vermont.

He studied at Hebron Academy, and then deciding on medicine as a profession, he followed the lectures at the Bowdoin Medical School in 1910, and obtained his medical degree at the University of Colorado in 1911. He then settled in Hebron for three years, making a beginning with the cases of children, and with the beginning of the War, in 1914, he went across with the British Army. While still in Europe, he studied in the hospitals for the diseases of children. He returned to Portland in 1917 and settled there for the rest of his life as a specialist in those diseases. He was a member of the state, county and local medical societies and was of great service to the Portland Board of Health by inoculating several thousand children against diphtheria. He was head man in charge of three baby clinics in Portland, in the Board of Health, and the Libby School. He was also an active Mason and busy socially with certain other clubs. He is survived by a widow, who was Edith Webb, and leaves a handsome reputation to the citizens of Portland and brothers in medicine.

J. A. S.

George Dill Rowe, East Providence, 1883-1934

Born in Smithville, Maine, September 29, 1856, he was one of the victims of the fire in a hotel in Worcester, Massachusetts, March 3, 1934. He was educated at the Oakland High School, then took a business course in Augusta, Maine, and finally studied medicine, graduating with honors from the Maine Medical School in 1889. He worked in a pharmacy for four years and learned much about drugs. He then received the appointment of interne at the Maine Insane Asylum in Augusta, where he studied dementia in all its various forms for four years. After that he located in Oakland, where he practiced for three years, and finally removed to Providence, Rhode Island, where he remained for the remainder of his life.

He is survived by his widow, who was Miss Maude N. Caswell, of Union, Maine.

J. A. S.

Harry Leslie Stilphen, Richmond, 1883-1933

His parents, Alfred L. Stilphen and Georgia Haven Hyland, were living in Pittston, Maine, January 24, 1883, when he was born. He studied directly through the regular course at Bridge Academy, in Dresden, and studied medicine at the University of West Virginia and Yale Medical School, obtaining his degree of doctor of medicine at the University of Vermont Medical School in 1913. He studied post graduate at the New Haven Hospital in Connecticut and at Newton in that same state, and later was an interne at the Shelton Sanatorium, also in Connecticut. He moved to Portland for general practice and remained there for four years, and later on he practiced in Richmond, where he became so favorably known that he was elected President of the Sagadahoc Medical Society. Somewhere about 1930 he met with a motor car accident, which compelled him to retire from practice, and gradually failing in health, he died September 19, 1933, leaving a high reputation as a man and practitioner.

He is survived by a widow, who was Laura A. Hall, of Dresden, Maine, two daughters and a son.

J. A. S.

— **DUES** —

See Chapter III, Section 2

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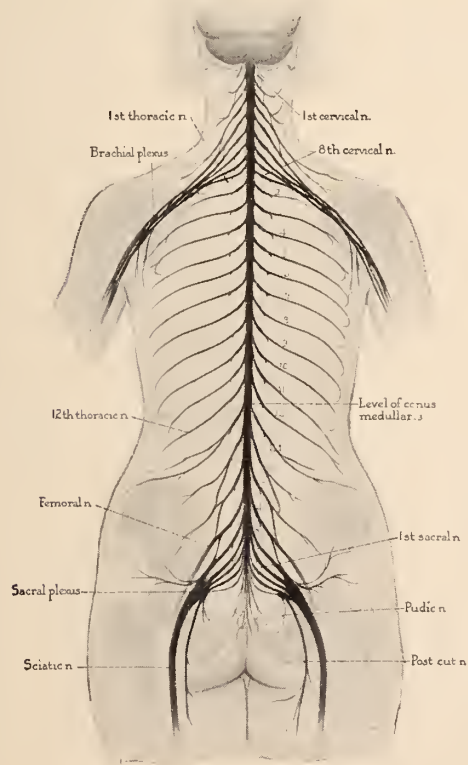
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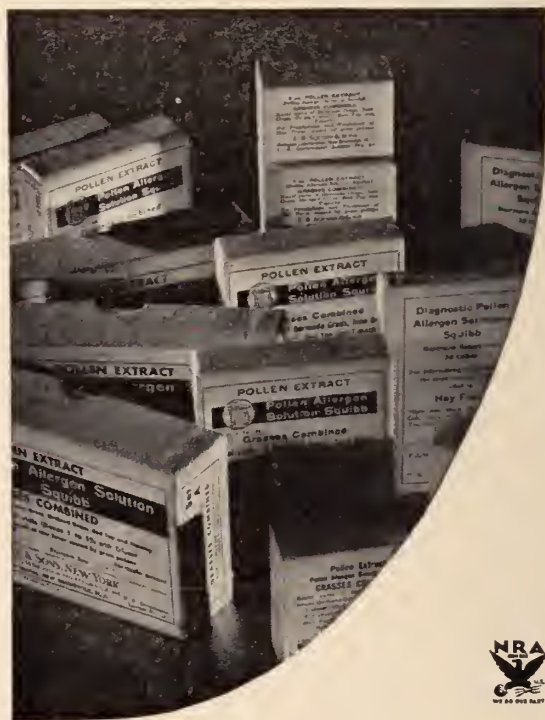
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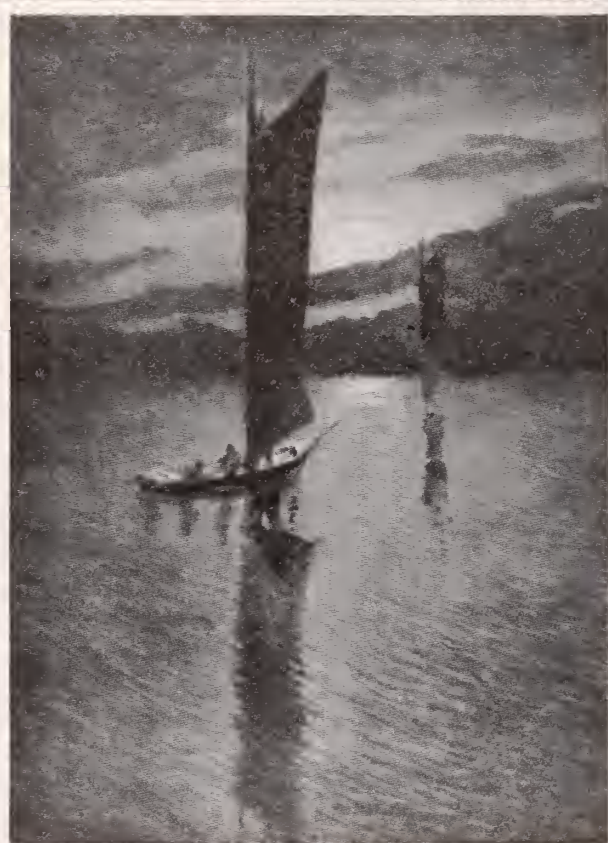
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HOLT AND McINTOSH: HOLT'S DISEASES OF INFANCY AND CHILDHOOD, 1933Y

In diarrhea, "The sugar added than milk conditions admit, some sugar other than dextrin sugar or cane-sugar being used, preferably dextrin maltose."—H. E. Small: *Diarrhoea*, in *Bottle-feeding*. J. Mame M. A. 12:152-153, Jan. 1932.

In diarrhea, "Carbohydrates, in the form of dextri-maltose, well cooked cereals or rice, usually can be handled without trouble."—B. B. Jones: *Infantile diarrhea, and the principles of its treatment*, as diets used in their treatment. *Pediatr. Monthly*, 65: 411.

"The most desirable sugar is dextri-maltose, because of all the sugars maltose is least apt to ferment."—A. J. Blau: *The use of protein milk*, p. 108. *J. Pediatr.*, 19:350, April 2, 1927.

Concerning the treatment of diarrhea, "If the weight remains stationary, it is an indication that loss of substance is occurring through the stools, mostly in the form of alkali salts. To equalize such loss of substance, the diet must be increased, but in such a way as to avoid causing fermentation. This may be done by adding dextri-maltose preparations until the infant is taking 160 calories the calories of body weight."—H. L. Ratnoff: *Orises per kilo, of body weight*. *Arch. Pediat.*, 41:771 Nov., 1924.

Nutritional disturbances, Arch. Pediat., 41:771 Nov., 1924.

Professor Finkelstein made the science of being able to feed the infants with proteic like protein milk, after only one day on a starved diet, is apparent. In addition, the further advantage of being able to safely add a carbohydrate milk within a few days, enables one to gradually bring the infant up to his basal needs. When protein milk was advised, the result that many children were advised, crown of Toronto. The suggestion was added to protein milk, Canada, that Dr. G. J. Feldstein still use protein milk. It emphasized that regardless of the state of the stools, carbohydrate must be given in milk within a reasonable time of void collapse."—G. J. Feldstein: *Clinical Pediatrics and Children*, Arch. Pediat., 41:771 Nov., 1924.

In cases of malnutrition and indigestion, "The appetite improves rapidly, and the stools soon become normal in appearance, if the sugars are intelligently prescribed. By this I refer to proper proportions of looseness. I have used there is a tendency to looseness," for the reason known as "dextri-maltose" refuted."

"After the preliminary short period of starvation, protein milk should be used... When the diarrhea has been sufficiently checked, dextri-maltose may be added and gradually increased until from 4 to 6 tablespoons are being used in infancy, Uney: *Acute nutritional disturbances of infancy*, Univ. West. Ontario M. J. 2:132-137, April, 1932.

Regarding the treatment of diarrhea, "In our experience, the most satisfactory carbohydrate for routine use is Mead's dextrimaltose No. 1."—F. R. Taylor: "Summer Complaints," Southern Med. & Surg., pp. 555-559, August, 1937.

SERIOUSNESS OF DIARRHEA
There is a widespread opinion that, thanks to improved sanitation, infantile diarrhea is no longer of serious aspect. But Holt and McIntosh declare that diarrhea "is still a problem of the foremost importance, producing a number of deaths each year..." Because dehydration is so often an insidious development even in mild cases, prompt and effective treatment is vital. Little states (*Canad. Med. A. J.* 13: 803, 1923), "There are cases on record where death has taken place within 24 hours of the time of onset of the first symptoms."

In cases of diarrhea, "For the first day or so no movements improve carbohydrate may be added. This should be the one that is most easily assimilated, so dextri-maltose is the carbohydrate of infants and young children, J. M. A. Alabama, 1:278-282, Jan., 1932.

If a preparation has a tendency to sugar fermentation, lowly low maltose content, as Mead's dextri-maltose."
"If it is desired to feed an unusually large amount of sugar to a baby, it is well to use a lactase-dextrin preparation, as in this way there is less danger of bringing about sugar fermentation than if lactose were used."—L. W. Hill: *Practical Infant Feeding*, W. B. Saunders Co., Phila., 1922, p. 206.

"The young baby, usually one-third milk and two-thirds formula, at first, and a half ounce of We prefer Dextri-Maltose as the carbohydrate containing most easily digested.... Preparations containing more maltose are more liable to produce on the other hand, are more liable to produce diarrhea.... Lactose which was very popular a while ago, is now almost entirely abandoned in our work. The consensus of opinion seems to be that milk sugar is often the cause of indigestion in normal infants and thus a source of fermentative dyspepsias and primary diarrheas."—J. H. Redding, Jr.: *Artificial feeding during the first year of life*, *Am. J. Hyg.*, 1923.

"Protein milk may be continued for several weeks when a gradual transition to a whole milk or evaporated milk formula, which will supply about one and one-half to two ounces of whole milk to every pound of body weight, is reached. This also should finally have the addition of dextri-maltose amounting to five to seven per cent."—R. O. Strong: *Summer diarrhea in infancy and early childhood*, *Arch. Pediat.* 47:344-354, June, 1930.

Preparations of dextri-maltose, "Dextri-maltose ready-made, are rapidly absorbed and leave little residue for fermentation."—V. A. Blank: *Protein milks in infant feeding*, *Arch. Pediat.*, 42:743-750, Nov., 1925.

"I begin to add carbohydrates slowly, by replacing ½ ounce Casee every two days with ¼ ounce of Dextri-Maltose, preferably Dextri-Maltose Number one. As a rule, this is tolerated. When one ounce of Dextri-Maltose is used, the Casee, of course, should be discontinued."—W. J. Pearson: *The etiology and treatment of diarrhea*, *Am. J. Hyg.*, 1925.

"When sugar causes diarrhoea, one can change the form of it. Mead's Dextrimaltose, in small doses is more quickly absorbed and superior to castor [cane] sugar. Lactose is expensive and seems not to be better than castor sugar."—H. B. Gladstone: *Infant Feeding*, 1925.

"Milk-sugar, which has been so extensively used in the past, should never be used where there is any digestive disturbance. It is not as easily as any digestive substance (granulated sugar) digested as either cane-sugar (granulated sugar) or dextri-maltose. The latter is the best of all sugars to use, especially if there is any tendency to looseness of the bowels."—A. Brown: *The Normal Child; Its Care and Feeding*, F. D. Goodchild Company, Toronto, 1923, p. 120.

In cases of fermentative diarrhea, "... the ideal plan of treatment would be to give a food of organisms thrive on) and high in protein. Calcium caseinate milk accomplishes this purpose. In our series of cases, we found it necessary formula. —A. G. DeSanctis and L. L. Pridder: *The value of calcium caseinate milk in fermentative diarrhea*, *Arch. Pediat.*

mer months (1) for colic and loose green stools in breast-fed infants; (2) in fermentative diarrhea in bottle-fed infants, (3) as a prophylactic against diarrhea in infections.

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Maine Medical Journal

The Official Organ of

The State and County Medical Societies

Vol. XXV

Portland, Maine, May, 1934

No. 5

Editorials

The Annual Meeting

The completed program for the Annual Meeting this year will be found in this number of the JOURNAL. It will be noted that one radical change has been made, in that the meeting will open Sunday evening with the first session of the House of Delegates. This will enable members to save valuable time by traveling Sunday and thereby being on hand for the opening of the Scientific Session Monday morning. As has been customary for the past few years, the group conferences will be held Monday and Tuesday forenoons. The complete list of conferences is included in this issue and selections may be made from this list. Members are requested to fill out the accompanying form, giving the conferences desired, and to mail same to Dr. F. T. Hill, Waterville, as early as possible. Those who, for one reason or another, are unable to do so in advance, may apply for their conferences upon registering at the Secretary's desk in the Bangor House. As each conference is limited to twelve men, the work of the committee will be considerably facilitated by prompt attention to this matter.

The two afternoon sessions, Monday and Tuesday, will be taken up with the formal papers. It will be noted that review conferences are booked for the early part of each

afternoon. These are for those members who are specializing in the subjects to be reviewed and have been so arranged that they will not conflict with papers on subjects of interest to these men. For example, purely medical papers are booked for the time when the review surgical conference is being held. These conferences will be over in time for the last two papers each afternoon. Abstracts of the papers are included in the program. This should facilitate discussion. Papers will be strictly limited to twenty minutes and discussions to five minutes.

The Maine Medical Association is extremely fortunate in having as a guest speaker this year, Dr. Dean Lewis, President of the American Medical Association and Professor of Surgery at Johns Hopkins. Dr. Lewis will speak on the "Differential Diagnosis of Breast Tumors." He will also speak Tuesday evening at the annual banquet.

Monday noon the county secretaries will meet at luncheon. A table will be reserved for them, and it is extremely important that every secretary be present, as many matters of consequence to the county societies will be discussed. At the close of the Monday afternoon session the annual election of officers will take place. Monday evening will be purely social. An attractive program of entertainment has been arranged by the

Bangor men, to take place at the Country Club. Tuesday noon there will be a luncheon for all Ex-Presidents. This should prove one of the attractions of the meeting, and it is hoped that a large number of these men who have made the Association what it is to-day will be present. At the same time all Johns Hopkins graduates are requested to meet and have luncheon together, in honor of Dr. Dean Lewis. Dr. T. S. Moise, of Bangor, is in charge of this luncheon, and any Johns Hopkins man who has not been notified of the final arrangements is asked to get in touch with Dr. Moise.

The annual banquet Tuesday evening will bring the meeting to a fitting close. This will be in charge of President W. E. Kershner. The gold medals will be presented to the fifty-year men at this time. The speaker will be Dr. Dean Lewis.

All sessions, excepting the two afternoon ones, will be held in the Bangor House. Conferences will be in several small rooms on the first floor. The commercial exhibit, which promises to be better than ever this year, will be in rooms adjoining the hotel lobby. The two afternoon sessions will be held in a large auditorium directly across the street from the hotel. The scientific exhibit will also be found in this hall, in adjoining rooms to the main auditorium.

Members are requested to make their own reservations directly with the Bangor House, where they will be filed in order of their receipt, "First come, first served." As the accommodations are somewhat limited, it is advisable to make reservations as early as possible.

F. T. H.

Meet Us in Bangor

On May 28th and 29th we shall foregather in Bangor for the purpose of holding our Annual Meeting. This is the first time in four years that the meeting has been held in a city, and we hope that physicians and their wives will feel called upon to attend who might not attend at a country resort. The accommodations will be adequate and fairly priced, the scientific show will be well put on,

and several important subjects will have to be discussed.

In addition, an active social committee plans constant entertainment for the tired doctor and especially for his equally weary wife.

The stores will be open as usual. The movie programs will be good. Golf is offered on any or all of three courses. Contract and auction will offer their charms to such as feel inclined, and on Monday evening a buffet supper and dance will invite all who are socially-minded. If the floods subside, there will be salmon fishing in the pool.

The Eastern Maine General Hospital will offer its facilities for observation, or, if any need it, treatment.

Never has the State Association offered so many baits of such alluring hue. Meet us in Bangor! See old friends and take part in the discussions! We promise you and Mrs. "Doe" a good and instructive time!

H. C. K.

"Our Newest Clinic"

Under the foregoing caption we note the following statement in the *Birth Control Review* for April, 1934.

"The clinic of the Maine Birth Control League, incorporated under the name of Maternal Health Clinic, opened its doors on February 28, 1934, at 193 Middle Street, Portland, Maine.

"A Medical Advisory Board of seventeen doctors, five of whom constitute an Executive Committee, an Honorary Committee of sixteen prominent citizens, and a Board of nine directors, give an adequate working force and guarantee the success of the movement.

"The clinic will be open every day from ten to twelve, but, for the present, a doctor will only be on duty on Wednesdays. The clinic starts most auspiciously and will supply a much-needed demand in the community. Miss Doris Davidson, coming with credentials from the Birth Control Clinical Research Bureau, is the efficient nurse in charge."

This is now one of one hundred and fifty such centers in the United States, occupied with the problem of the underprivileged married woman, who, for reasons of health pri-

marily, and, secondly, because of her economic status, needs relief from excessive child-bearing. Here, patients and doctors are taught modern, effective methods of birth control at a cost to the patient varying from three dollars to nothing, including supplies.

We in this country pride ourselves on being one of the enlightened peoples of the world, and yet, at a conservative estimate, there are 700,000 abortions performed yearly in "Columbia, you're a gem of a notion."

A recent survey of 7,500 maternal deaths made by the Children's Bureau states that "almost exactly a fourth of the women had died after some form of abortion."

The New York Academy of Medicine made a study of 2,000 maternal deaths covering a period of three years and reported that 17.5 per cent. "were connected with the mysterious interruption of a pregnancy in its early months."

In both the federal and the New York surveys, 73 per cent. of the abortion deaths were septic, indicating that they were induced either by criminal practitioners or by bungling, clumsy, dirty expedients tried at home.

In either case, and at all events, it behooves a people that calls itself civilized to remove this foul blot from its escutcheon. By making correct and safe contraceptive advice available to needy persons, who, in sheer desperation, become the prey of commercial vultures, incompetent doctors, and domestic diagnosticians and advisers, clinics of this type have brought renewed hope and courage and health to countless despairing and diseased women, and have saved them from the horror of an abortion, if not from an abortion death.

This clinic is made possible by the friends of suffering women and little children. It has no endowment, and its doctors, ever interested in disease prevention, give their services.

The appliances used to prevent conception have been proved after years of trial to be harmless. In the hands of those experienced in their application, better than 90 per cent. of successful results have been attained, depending, of course, upon the skill of the doctor, upon the character and thoroughness of instruction to the patient, and upon the patient's ability to comprehend and cooperate.

Since most physicians who heartily approve the principle of birth control have had no practical experience with it, their attempts to apply contraceptives or to give instruction are often disappointing to all concerned. Therefore, the doctors of Maine are invited, *indeed urged*, not only to refer suitable cases to the clinic, but to attend themselves for the purpose of familiarizing themselves with the technique under the tutelage of Miss Doris Davidson, an expert worker for two years with the Birth Control Clinical Research Bureau of New York. This is a rare opportunity to learn how to do the work as it *must be done* if good results are to be expected. Miss Davidson is an ardent worker for the cause and the Board of Directors cordially invites you to come and receive this necessary instruction gratis, not only that you may be able to advise *and retain* private patients seeking this help, but, also, in order that you may be impelled to organize similar clinics elsewhere in the State.

E. W. GEHRING.

Editorial Notes

Birth Control Bill S. 1842

Most of us abhor the existence of restrictions on their judgment in the treatment of patients, and, most of all, when it comes to government restrictions.

In the matter of birth control prohibition, which is now under discussion, and concerning Birth Control Bill S. 1842, which has been favorably reported and is on the Senate

calendar, we believe if the welfare of a woman requires a limitation of her offspring, that her family physician should have the right to instruct her in the best method to accomplish this result. It is contrary to all medical belief that the laity should tell a physician what to do for any patient, no matter whatever may be the conditions demanding his services.

J. A. S.

Editorial Note

Attention is called to the announcement of Dr. Kelley, inviting the profession to attend the staff meetings at the fine new hospital at Togus. Dr. Kelley has secured the men of experience and caliber which make for excellent staff programs. The writer attended the last staff meeting and can vouch for the excellent class of work that they are doing at

that hospital. It is desirable that those of us who can, attend these meetings as often as convenient. We can there get a new viewpoint on our veteran ills, whereby we may be of more assistance to this large class of infirm men. Contacts between our own civilian group and this official group is very much to be desired and very much worth while.

W. E. K.

Program of Eighty-second Annual Session

Conferences

MONDAY, MAY 28TH, AT 9.30 A. M.

1. "Childhood Tuberculosis," Dr. Lester Adams, Hebron
2. "Unfortunate Results in Treatment of Fractures and How to Prevent Them,"
Dr. E. S. Hall, Portland
3. "Head Injuries from a Neurosurgical and Neurological Standpoint,"
Dr. H. Eugene Macdonald, Portland
4. "Dysmenorrhœa," Dr. A. H. McQuillan, Waterville
5. "The Gall-bladder Stones and Operations," Dr. H. W. Garcelon, Auburn
6. "X-ray of Chest and Orbit," Dr. E. S. Cummings, Portland
7. "Cardiac Arrhythmias," Dr. H. E. Pressey, Bangor
8. "Usual Pre-operative Preparation and Post-operative Treatment in General Surgical Practice,"
Dr. N. A. Fogg, Rockland
9. "Eye Injuries," Dr. W. J. Gilbert, Calais
10. "Sinusitis," Dr. T. J. O'Sullivan, Portland

MONDAY, MAY 28TH, AT 11.00 A. M.

11. "Diabetes vs. Renal Glycosuria in Children,"
Dr. L. L. Powell, Portland, with Drs. Harry Emery and M. Warren, Portland
12. "Strictures of Urethra," Dr. Alfred Mitchell, Jr., Portland
13. "Abdominal Complications in Obstetrics," Dr. H. D. Ross, Sanford
14. "Treatment of Syphilis of the Central Nervous System,"
Drs. F. C. Tyson and F. E. Carter, Augusta
15. "Cytological Studies," Dr. Julius Gottlieb, Lewiston
16. "Concerning Diagnosis in the General Country Practice," Dr. F. H. Badger, Winthrop
17. "Empyema," Dr. T. S. Moise, Bangor

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| 18. | "Skin Manifestations in General Disease," | Dr. O. R. Johnson, Portland |
| 19. | "Uveitis," | Dr. A. W. Moulton, Portland |
| 20. | "Acute Throat Conditions," | Dr. F. T. Hill, Waterville |

TUESDAY, MAY 29TH, AT 9.30 A. M.

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| 21. | "Feeding of Older Children," | Dr. F. P. Webster, Portland |
| 22. | "Bone Tumors," | Dr. C. H. Rand, Lewiston |
| 23. | "Early Symptoms in Mental Disorders," | Dr. C. J. Hedin, Bangor |
| 24. | "Gynæcology—Endocrine Factors," | Dr. Henry Sprince, Lewiston |
| 25. | "Appendicitis," | Dr. W. E. Tobie, Portland |
| 26. | "Thoracic Surgery—Results of Collapse Therapy in State Sanitoria," | Dr. G. E. Young, Skowhegan |
| 27. | "The Role of Deep Radiation in Cancer and Blood Dyscrasias," | Dr. H. E. Peters, Auburn |
| 28. | "Meningitis," | Dr. Henry Knowlton, Bangor |
| 29. | "Significance of Eye Symptoms in Head Injuries," | Dr. S. L. Andrews, Lewiston |
| 30. | "Focal Infections in Ear, Nose and Throat and Their Relation to Systemic Disease," | Dr. W. E. Ellingwood, Rockland |

TUESDAY, MAY 29TH, AT 11.00 A. M.

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| 31. | "Treatment of Chronic Tuberculosis," | Dr. F. J. Welch, Portland |
| 32. | "Hematuria," | Dr. C. H. Jameson, Rockland |
| 33. | "Toxemias of Pregnancy," | Dr. L. P. Gross, Lewiston |
| 34. | "Cervicitis," | Dr. J. A. Lethiecq, Brewer |
| 36. | "Diseases of the Arteries," | Dr. R. V. N. Bliss, Bluehill |
| 37. | "Points in the Recognition and Management of Certain Affections of the Thyroid and Parathyroid Bodies," | Dr. I. M. Webber, Portland |
| 38. | "Congenital Cataract," | Dr. M. C. Moulton, Bangor |
| 39. | "Some Troublesome Nasal Conditions," | Dr. J. L. Johnson, Bangor |
| 40. | "The Year's Progress in Pediatrics," | Dr. T. A. Foster, Portland |

Review Conferencs

MONDAY, MAY 28TH, AT 2.00 P. M.

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|---|--|
| "The Year's Progress in Medicine," | Dr. E. H. Drake, Portland, and Dr. J. O. Piper, Waterville |
| "The Year's Progress in Ophthalmology," | Drs. E. E. Holt, S. J. Beach, Portland, and Dr. H. F. Hill, Waterville |



TUESDAY, MAY 29TH, AT 2.00 P. M.

"The Year's Progress in Surgery,"

Dr. E. H. Risley, Waterville, and Dr. F. H. Jackson, Houlton

"The Year's Progress in Oto-laryngology," Drs. H. P. Johnson and G. O. Cummings, Portland

(Perforation for tearing off.)

To Doctor F. T. Hill,
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In case any of these are filled I desire Nos.
(Select four)

.....M. D.
(Signature)

Fill out and mail to Dr. F. T. Hill, Chairman of the Program Committee.

Program

SCIENTIFIC SESSION

MONDAY, MAY 28TH, AT 2.00 P. M.

1. "Pre- and Post-operative Surgical Case," Dr. P. P. Thompson, Portland

In the past ten years, a veritable flood of research in biological chemistry, bacteriology, and physiology has given us knowledge that should help us to avoid most of our surgical complications by prevention or treatment with intelligence and promptness in the incipient and treatable stages. An attempt will be made to evaluate this knowledge.

Consideration of basal anæsthesia, especially avertin. Acidosis, alkalosis and dehydration with symptoms and newer methods of prevention and treatment. Later conception of antiseptics, treatment of antiseptic wounds—"biological antiseptics."

Discussion opened by Dr. Harry S. Emery, Dr. Mortimer Warren.

2. "Sterility," Dr. M. F. Ridlon, Bangor

Sterility in its broadest sense applies to a condition in which the woman does not conceive, or if she does conceive she is unable to bear children. Many cases of sterility are due to minor anatomical and pathological conditions which we easily recognize on office examination and in many cases respond most satisfactorily to simple office procedure. Particularly anatomical positions of the uterus, simple pathological conditions of the cervix, etc. In dealing with sterility, we should remember that sterility may occur in the male as well as in the female.

Discussion opened by Dr. Arthur H. McQuillan, Dr. Henry Sprince.

3. "Diseases of the Musical Profession,"

Dr. S. H. Kagan, Augusta

The title is used in its broadest sense, and includes the disabilities associated with the different instruments—as cracked lips, sore tongue, violinist's cramp, calluses—as well as conditions not associated with musical instruments—as director's cramp, writer's cramp of composers and copyists, and the laryngeal conditions in singers. The subject includes the amateur and student as well as the professional.

Discussion opened by Dr. Frederick T. Hill, Dr. E. W. Gehring.

4. "Continuous Drainage in the Treatment of Cerebrospinal Infections,"

Dr. L. H. Smith, Winterport

This treatment consists in decreasing the intracranial and intraspinal pressure to equal the atmospheric pressure by means of the lumbar puncture, and is followed by the introduction into the general circulation of 1 to 3 liters of a hypotonic saline solution. There is an increase in the cerebrospinal fluid formed from all of the capillaries of the cerebral nervous system. This causes a continuous lavage of the deeper structures into the perivascular and subarachnoid spaces, resulting in a washing out of bacteria, dilution of toxins, and possible mobilization of antibodies.

Results:

1. Immediate relief of headache and general discomfort.
2. Decrease in mortality.

Discussion opened by Dr. George Cummings, Dr. H. C. Knowlton.

TUESDAY, MAY 29TH, AT 2.00 P. M.

5. "Some Observations on the Treatment of the More Common Forms of Heart Disease,"

Dr. W. J. Renwick, Auburn

Heart disease—incidence—mortality in Maine—the threefold diagnosis—digitalis, a liability as well as an asset—the problem of edema—paroxysmal tachycardia—auricular fibrillation—auricular flutter—the heart in thyroid disease—the heart in coronary artery disease—lentic heart disease—congestive failure.

Discussion opened by Dr. J. O. Piper, Dr. E. H. Drake.

6. "Progressive Health Work in Public Schools,"

Dr. H. H. Cleveland, Portland

Original work, curative in character, and the stamping out of existant epidemics.

Recent work along lines of preventive medicine.

Necessity of planning work over some definite period of time.

CONFERENCES

Apply for conference tickets early. Aid the Committee! Secure your first choice! Mail the coupon today to F. T. Hill, M. D., Waterville, Maine.

SCIENTIFIC EXHIBIT

Members having material should communicate with Julius Gottlieb, M. D., Lewiston, Maine.

Health program.

1. Detection of handicaps, physical and mental.
2. Correction of defects.
3. Persistence in follow-up work.

Conservation of vision.

The problem of the hard-of-hearing child.

Tuberculosis survey.

Malnutrition.

Success in combating diphtheria.

What about small-pox?

Discussion opened by Dr. Thomas A. Foster, Dr. Paul Wakefield.

7. "The Differential Diagnosis of Breast Tumors,"

Dr. Dean Lewis, Baltimore (President of A. M. A.)

Discussion opened by Dr. T. S. Moise, Dr. W. B. Moulton.

8. "The Evolution of the Medical Examiner and His Present Day Problems,"

Dr. W. E. Freeman, Yarmouth

The founding of the Medical Association.

The MAINE MEDICAL JOURNAL and its importance to medical science.

The historical development of the subject chosen.

Post-mortem examinations and how obtained.

Their importance in this branch of medicine.

The Revised Statutes of Medical Examiners and their duties.

Importance of ability and efficiency in the Medical Examiner.

Best measures for the adjustment of the Medical Examiner system.

Classification of cases calling for a Medical Examiner.

Illustrations of violent deaths and their incidence.

Personal observations.

Endorsement of Medical Examiners by our society.

Qualifications of the Medical Examiner.

Proper legislation for their protection.

Medical knowledge necessary for the detection and establishment of crime.

Discussion opened by Dr. William Holt, Dr. Mortimer Warren.

BANQUET

Tuesday, May 29th, at 7.00 P. M.

Speakers:

Dr. W. E. Kershner, President of the
Maine Medical Association.

Dr. Dean Lewis, President of the American
Medical Association.

LADIES WELCOME!

A special program for the entertainment of the ladies has been planned by a committee of Bangor physicians' wives. A good time for all and all the time!

County Delegates and Alternates to the 1934 Annual Meeting

Androscoggin:

A. W. Plummer, Lisbon Falls.
B. W. Russell, Lewiston.
R. N. Randall, Lewiston.

Alternates:

M. E. Goldman, Lewiston.
Anthony E. Peters, Lewiston.

Aroostook:

J. G. Potter, Houlton.
S. W. Boone, Presque Isle.

Alternates:

F. H. Jackson, Houlton.
H. F. Kallock, Fort Fairfield.

Cumberland:

William Holt, Portland.
Adam P. Leighton, Jr., Portland.
Ernest S. Files, Portland.
S. Judd Beach, Portland.
Eugene Drake, Portland.
Owen Smith, Portland.
E. G. A. Stetson, Brunswick.
George Tibbetts, Portland.

Franklin:

A. E. Floyd, New Sharon.

Alternate:

C. W. Bell, Strong.

Hancock:

J. D. Phillips, Southwest Harbor.

Alternate:

A. H. Parcher, Ellsworth.

Kennebec:

William J. O'Connor, Augusta.
Frederick R. Carter, Augusta.
John O. Piper, Waterville.

Alternate:

Leon D. Herring, Winthrop.

Knox County:

Delegate:

Neil A. Fogg, Rockland.

Alternate:

William Ellingwood, Rockland.

Oxford:

J. G. Littlefield, South Paris.
J. A. MacDougall, Rumford.

Alternate:

H. M. Howard, Rumford.

Penobscot:

H. M. Goodwin, Bangor.
H. E. Pressey, Bangor.
H. C. Knowlton, Bangor.
H. C. Scribner, Bangor.
H. E. Thompson, Bangor.

Alternate:

A. C. Adams, Orono.

Piscataquis:

M. O. Brown, Dover-Foxcroft.

Alternate:

G. E. Dore, Guilford.

Sagadahoc:

E. F. Pratt, Richmond.

Alternate:

W. E. Kershner, Bath.

Somerset:

W. S. Stinchfield, Skowhegan.

Alternate:

H. E. Marston, North Anson.

Washington:

W. H. Bunker, Calais.

Alternate:

O. F. Larson, Machias.

York:

C. W. Kinghorn, Kittery.
S. A. Cobb, Sanford.

Alternate:

A. G. Wiley, Bar Mills.

NOTE: We regret that up to date we have no definite names of delegate from Waldo County.

Report of Secretary-Treasurer

The Association's year ends rather more calmly than it began. The Council has met frequently and accomplished much. (A report of the Council will be read by the chairman at the First Meeting of the House of Delegates.) During the year your President has attended many County Society meetings, accompanied often by the President-elect, and has kept in close contact with county, state and national medical affairs.

The Editorial Board has functioned to an advantage to the JOURNAL, in spite of the short time it has had to organize and the great distances dividing the members.

The County Secretaries, through their co-operation and promptness, have been most helpful to your Secretary.

Our cash balance on hand, not including our impounded deposits in the Fidelity Trust Company, is \$5,446.20. Of this amount \$5,012.22 is in the Canal National Bank on checking account and \$433.98 in the same bank on savings account. Our active cash balance on June 1st, 1933, was \$1,139.31, as may be seen in the Association JOURNAL audit printed elsewhere in this issue. This audit, you will note, covers a period of eleven months, because of the annual meeting being held in May this year instead of June. The payment of dues has in some counties been exceptionally prompt, and the whole general financial outlook for the Association appears very encouraging.

At this time your Treasurer would like to suggest, as did Dr. Davis in June, 1932, that the Association carry only balance enough in its checking account to meet current expenses, perhaps with a limit of \$2,000.00, and deposit receipts over this amount in the Association's savings account. It would be wise, however, to allow your Treasurer to draw on the savings account should occasion arise for unusual expenditure.

Your Secretary attended the Annual State Secretaries' Meeting in Chicago last September. The conference was extremely interesting and instructive. Among the excellent papers presented was one of especial note read by Dr. Dean Lewis, President of the A. M. A., on the "*Quality of Medical Care*,"

which will be published in the A. M. A. Bulletin in the near future and should be read by all who give medical care. State medical associations, large and small, all have relative problems, and this meeting gives a fine opportunity to compare notes and study methods of other organizations. Your Secretary's entire expense for attending this meeting was paid by the A. M. A.

At the May annual session the Association will honor five members who have practiced medicine for fifty years.

Since June, 1933, we have lost twenty-two members through death. Twenty-five new members have been added to our ranks.

Your Secretary recommends the practice of holding the annual meetings at summer resorts rather than in cities, as such sessions are more united and congenial. Then a clinical session, such as was held in Bangor this last winter, given at some large city hospital, preferably in the fall, will give our membership a well-balanced advantageous year.

Respectfully submitted,

REBEKAH GARDNER.

Report of the Necrologist

At this time we report the following members whom we have lost from our ranks in the current year:

George Austin Allen, Lovell.
 Clarence Atwood Baker, Portland.
 E. C. Bates, Houlton.
 Fred Loring Dixon, Lewiston.
 Hartwell James Frederick, Augusta.
 A. R. Harmon, Lubec.
 Willis Leroy Hasty, Norway.
 Angus G. Hebb, Bridgton.
 Harry W. Johnson, Bangor.
 Frank Kilburn, Presque Isle.
 Charles Colby Larrabee, Prospect Harbor.
 Arthur Jewett Longee, Fryeburg.
 Louis Bayard Marshall, Portland.
 Eben Jordan Marston, Bath.
 Harris James Milliken, Bangor.
 Abner Oakes, South Berwick.
 Carl R. O'Brien, Bangor.

Bertrand D. Ridlon, Gorham.
 George Dill Rowe, Providence, R. I.
 Abner Orimel Shaw, Portland.
 Clarence R. Simmons, Oakland.
 Harry Leslie Stilphen, Richmond.
 C. E. Wasgatt, Camden.

We shall briefly characterize these men. George Allen was a good diagnostician. Clarence Baker was an excellent practitioner in the east end of Portland. Dr. Bates, of Houlton, was a good country practitioner. Dixon worked in Lewiston until his health failed. Then he went west, gained and then lost, and came home to die. He made his name wherever he went. A man with a most genial personality was Frederick. He was President of the Kennebec County Medical Society at one time. Dr. Hebb, we remember, was famous for his post-graduate experiences. Dr. A. R. Harmon, of Lubec, had been a member in good standing in the Washington County Society for fourteen years until the past year. Dr. Harmon was well known in his county. Willis Hasty enjoyed a fine reputation and practice in Norway. Harry Johnson is remembered as a very clever eye, ear, nose and throat man. Dr. Lougee came to Fryeburg, where he combined eye work with his general practice, in 1903. He practiced in St. Petersburg winters. Eben Marston was highly thought of as a medical adviser. A young and very promising surgeon and physician was Milliken, of Bangor. Another great loss to Bangor and our Association was Dr. O'Brien, who was a Captain in the Medical Service during the World War. Abner Oakes, of South Berwick, died too young. Bertrand D. Ridlon was in charge of four base hospitals during the great war. Rowe, we remember as a pharmacist in Portland, afterwards studying medicine and removed to an excellent medical practice in Providence, R. I. Dr. Shaw was a highly popular man and physician in Portland. Clarence R. Simmons, of Oakland, was an active, well-thought-of physician. Stilphen practiced first on Congress Street, Portland, before moving to Richmond. Dr. C. E. Wasgatt received his fifty-year service medal in 1932.

Respectfully submitted,

JAMES A. SPALDING.

Report of Councilor, First District

The report of the Councilor from the First District—Counties of Cumberland and York—is herewith submitted.

I have arranged and attended all meetings of York County Society, as Secretary, and have attended most of the Cumberland County meetings.

The membership, I think, will exceed that of last year, in both societies.

Dues are coming in much better than in the past year.

The State President and President-elect have attended most of the meetings of York County Society, and have been very helpful in keeping up the interest. I wish to commend Secretary Holt on his official work in Cumberland County Society.

I am very much in favor of using our own state physicians for our county programs.

I believe that the two counties are in a prosperous condition and that all local problems are well handled by local officers.

Respectfully submitted,

C. W. KINGHORN,
Councilor.

Report of Councilor, Second District

The three county societies of the Second District have held their usual number of meetings and have had interesting programs.

The dues in Franklin are all paid, in Oxford nearly all, but I have not yet heard from Androscoggin on this point.

The three societies are in good condition.

GEORGE L. PRATT,
Councilor.

ELECTION OF PRESIDENT-ELECT

(according to By-Laws, Chap. IV, Sec. 7)
 "shall be by direct ballot in the general assembly of the Association at the close of the first general afternoon session."

MONDAY, MAY 28TH

BE PRESENT!



Report of Councilor, Third District

As Councilor of the Third District, it is very gratifying to report that the usual number of regular meetings of the county societies have been held. The programs have been interesting and instructive, and the attendance especially good. Several members of the county societies in this District come as far as thirty or forty miles to these meetings.

Several young men from out of the state have entered the field of general practice in the District. These men are well trained, ambitious, and have been well received.

I feel that this District will be well represented at the Annual Meeting in Bangor.

Sincerely yours,

WM. ELLINGWOOD, M. D.,
Councilor.

Report of Councilor, Fifth District

The Fifth Council or District has had a prosperous year.

The Washington County Medical Society held three meetings during the year, with an average attendance of fourteen from a membership of twenty-four.

I am sorry to record the death of one of the older members, Dr. A. R. Harmon, of Lubec.

No new members were added.

The Hancock County Medical Society held four meetings during the year, with good attendance.

One new member was gained and none lost, so that our membership now stands at twenty.

Arrangements for this year's meetings are already going forward by the officers of both societies.

RALPH W. WAKEFIELD,
Councilor.

SERVICE MEDALS

Presentation of Fifty Years' Service Medals by President at Banquet, Tuesday, May 29th, at 7.00 P. M.

Report of Councilor, Sixth District

The sixth district, in the main, I think is in a very healthy condition.

During the summer a joint meeting of Piscataquis and Penobscot Counties was held at Kineo. This was, as usual, a distinct success. We had a very fine scientific session, an excellent luncheon, a delightful boat ride up the lake, and a good attendance.

In June of this year a joint meeting of Penobscot and Aroostook Counties will be held in Houlton. I expect this will also be a complete success.

In February the staff of the Eastern Maine General for the Penobscot Society and sponsored by the State Association, conducted a two-day clinic in Bangor. Unfortunately, this was coincident with one of the worst storms of the winter, so the attendance was not all that could be desired. On the whole, however, we were very well satisfied.

J. L. JOHNSON, M. D.,
Councilor.

Report of Scientific Committee

I hereby submit my report as Chairman of the Scientific Committee.

Several meetings of the Scientific Committee have been held during the year. Early in the fall the committee organized and planned its work for the year. As in the preceding year, two lines of activity were taken up. In addition to preparing the program for the Annual Meeting, a list of available speakers for county programs was prepared and sent to all County Secretaries. Each member of the committee was designated to act as a liaison officer for the several county societies nearest him. In this capacity he could act as an advisor to the county officers in preparing programs, if desired, and could keep informed of worthwhile papers presented to these societies which might well be made available to other county programs. While, as yet, this service has not been utilized to any great extent, it is hoped that, as time goes on, it will prove of value to the

different constituent societies. The coöperation of the County Secretaries will do a good deal to facilitate this and make the programs of the societies more in keeping with the general program of the State Association.

In making up the program for the Annual Meeting, the same general policy of the last few years has been followed. All clinical papers are by members of our own Association. This not only gives us a live program on subjects which are of vital interest to our members, but stimulates our men to literary efforts. The ideal program would combine this type of paper with one or two of research nature, from some of the larger medical centers. As the financial condition of the Association improves, it will be possible to extend this feature. We are fortunate this year in having, as our guest speaker, Dr. Dean Lewis, Professor of Surgery at Johns Hopkins, and President of the American Medical Association. His presence alone should make this meeting a most valuable one.

The Conference system, which has been so successful, is again an important feature of this year's program. Last year review conferences were held in Ophthalmology and Oto-laryngology, taking up the year's progress in these subjects. These proved so popular that there was a demand for similar conferences in other branches of medicine. Accordingly, this year review conferences in Surgery, Medicine and Pediatrics have been added. These have been so arranged that each review conference will be held at a time when the papers being read appeal especially to groups other than those at the conference.

An attempt is being made to survey the existing facilities for clinical study in our various hospitals, so that members desiring an opportunity of brushing up in any particular line of work may know where to avail themselves of it.

Recommendations: We recommend the continuance of the conference system of program, feeling that it has definitely proven its worth. We also recommend a limited number of papers, those of clinical type to be presented by our own members, with the addition of research papers as our funds permit. We further recommend the continuance

of the program service to the county societies and urge that the societies make freer use of it. We repeat our recommendation of last year, that greater care be exercised in the selection of members of the Scientific Committee, to make sure that those selected shall be interested in this phase of the work and be willing and able to contribute to it.

Respectfully submitted,
FREDERICK T. HILL.

Report of the Committee on Medical Education and Hospitals for 1934

In order to learn what could be done to bring about a better understanding between the family physician, the hospital and the attending physician, your committee sent out the following questions to the forty-seven largest hospitals in the state.

First—Do you send diagnostic summaries with the diagnosis to physicians who refer cases to the hospital, after the patients have been examined and observed, and the results of the laboratory findings obtained?

Second—In your opinion, would such summaries have a tendency to help the family physician to make more careful examinations and more accurate diagnoses of diseases?

Third—Do you think that hospital reports or summaries of the diagnoses and findings on referred patients, in addition to an educational value, would have a tendency to establish more confidence in the hospital, and create a better feeling between referring physicians and the physicians directly connected with the hospitals?

Twenty-seven hospitals replied as follows:

Question one—yes, 6; no, 14; on discharge, 3; on request, 4.

Question two—yes, 22; doubtful, 1; not answered, 4.

Question three—yes, 21; doubtful, 2; not answered, 4.

From the above survey it appears that only a small number of the hospitals in the state send out any reports or summaries to the referring physicians.

One physician wrote, in part, as follows: "If we send patients to some larger place we lose track of them almost entirely. We do not know whether our diagnosis and our reason for sending them are correct and warranted. And we find it hard to discover this, for the patient is told in such scientific language what has been done or what his trouble is, that when he comes home he really knows less about himself than when he went. I do feel that if the family physician were taken a little more into the confidence of the hospital physician, he would send the next patient more willingly."

Many other replies emphasized the educational value to the family physician of such reports and the fact that he was entitled to such reports. Other replies by physicians stated that, in their opinion, such reports or summaries would not only establish a better feeling and understanding between the family physician and the hospital staff, but that it would also tend to improve the hospital service.

One physician, who thoroughly believed in the educational value to the family physician of reports on patients sent to a hospital, also believed that referring physicians were under certain obligations to the hospital or specialist to whom he referred patients, which he expressed, in part, as follows: "A physician referring a case to a hospital or specialist in another town should send also a statement of the patient's ability to pay for treatment."

It is evident from the survey that only a small number of hospitals in the state send reports or diagnostic summaries of the patient's condition to the physicians who send patients to the hospitals for treatment. The great majority of the hospital superintendents also expressed emphatically their belief that such reports would be of distinct value to the family physician and have a tendency to bring about a better understanding and coöperation between referring physicians, hospitals and hospital staffs.

Your committee therefore respectfully makes the following suggestions or recommendations:

First—In view of the above facts, and because the committee unanimously believes

that it would be of distinct educational value to the family physician to receive reports or diagnostic summaries of the pathological conditions as revealed by laboratory and other methods of examinations at the hospitals; and because it is the opinion of your committee that such reports would have a tendency to establish more confidence in the hospitals, and create a better feeling between referring physicians and the hospital staffs; and because we believe that such reports would tend to bring about better treatment of patients, as well as to be of distinct value to the medical profession, we recommend that all hospitals and specialists send reports or diagnostic summaries to referring physicians, either after the examination has been completed or after the discharge of the patient.

Second—In order to promote further coöperation and efficiency in the treatment of patients sent to hospitals or specialists, your committee respectfully recommends that physicians who refer patients to a hospital or specialist for treatment send a statement of the patient's ability to pay for such treatment, as far as such ability may be known to the referring physician. Such a statement, in the opinion of your committee, would in many cases tend to correct the increasing tendency toward unnecessary hospital and medical charity.

These suggestions and recommendations are offered because the committee believes that they would be of a distinct benefit to the patient, the hospital and the medical profession alike.

Respectfully submitted,

CARL J. HEDIN, M. D.,

F. W. MITCHELL, M. D.,

STEPHEN S. BROWN, M. D.,

*Committee on Medical Education
and Hospitals.*

HOUSE OF DELEGATES

First Meeting: Sunday, May 27th, at 8.00 P. M.

Second Meeting: Monday, May 28th, at close of afternoon session.

The Program at the Annual Meeting is to be run on Daylight Time.

Report of Committee on Public Relations

The Committee on Public Relations begs to report that no specific problems have been considered during the past year. I still feel as I did three years ago, that the state is adequately covered with practitioners of medicine. Vacancies do occur, but they are quite quickly filled.

There is, however, one trend with which the whole profession should interest itself intensely. I refer to the ever recurring question of the socialization of medical practice or of state medicine.

It is not my intention to argue as to how we might fare in an entirely socialized state, but it does seem to me that we are so sufficiently socialized already as to be able to wait a bit for the rest of life to catch up. Nevertheless, unless we can offer some plans of our own, some sort of scheme may be forced upon us, either by legislative action, or, unless financial affairs change radically, by the inability of large groups of our patients to pay us at all.

We in Maine seem to be very well off as compared with physicians in states somewhat west of us and in the large cities. Along this line there is an article in the May issue of *The American Mercury* which is well worth reading. It is entitled "The Plight of the Doctor," and paints none too rosy a picture of what might come to us, and, indeed, what has come to us in some cases.

One has no plan to offer to offset the inability of one group of patients to pay nor the desire of others to secure free medical attention. But a plan we must have ere long, or we shall lose our present status, for it is true that "You can't beat something with nothing," and the something is upon us.

We are not alone in our dilemma, nor are we alone in our lack of ideas. The American Medical Association itself fights doggedly on for the status quo, but it seems to me to be a losing battle.

We cannot, I expect, settle on a plan at the May meeting, but we should have some discussion of the matter and focus our attention upon it more acutely.

For the committee,

HENRY C. KNOWLTON.

Report of Legislative Committee

This not being a legislative year, there is nothing much for this committee to report. There have arisen so far no matters that made necessary a meeting of this committee.

J. L. JOHNSON, M. D.,

Chairman.

Report of Nursing Committee

There is nothing to report concerning the activity of the Committee on Nursing Affairs. The next move is to come from the Nurses' Association, and thus far they have not taken any steps toward a revision of the rules and regulations regarding the registration boards, etc.

Respectfully submitted,

R. V. U. BLISS,

Chairman.

Report of Committee on Study of Maternal Mortality

The work of the Committee on Study of Maternal Mortality during 1933 has been mainly a preliminary review of the vital statistics compiled by the State Bureau of Health. The records from 1927 to 1932, inclusive, have been analyzed, and each certificate of a puerperal death during 1933 has been carefully studied. In this study the courtesy and co-operation of the State Registrar of Vital Statistics has been very helpful and has been greatly appreciated.

It is a satisfaction to note that the number of deaths per thousand births has steadily decreased during the six years 1927 to 1932, and the record in this state compares favorably with that of the other New England states. However, this does not alter the fact that there is still room for improvement. Exclusive of deaths following abortion and ruptured ectopic gestation, there were ninety maternal deaths in Maine in 1933, of which twenty-two were due to puerperal sepsis, nineteen to nephritis and eclampsia, and five to early toxemia. It would seem that this figure can be materially reduced; with ade-

quate prenatal care and improved surgical technique it should at least be cut in two.

Arrangements have been made to study even more carefully the maternal deaths occurring in 1934. Some certificates are not entirely clear as to causation of death, and of course very few indicate all the factors leading up to the fatal result. Therefore, if inquiry is made by this committee of any physician in regard to any particular history, it should not be taken as a personal criticism, but should be answered as fully as possible in the same spirit of co-operation in which it is asked. We believe that Maine doctors are doing as good work as the average in states of similar population distribution, but we want Maine to do much better than the average. The first step toward betterment is to strike a trial balance and find out for ourselves in what respects we are deficient.

As any study of this kind, to be of value, must cover a period of several years, we suggest the continuance of a committee for this purpose as a regular standing committee of the Maine Medical Association.

Respectfully submitted,
 ROLAND B. MOORE,
 RALPH L. REYNOLDS,
 CHARLES D. NORTH,
 MAGNUS RIDLON,
 SAMUEL R. WEBBER,
Committee.

Report of Committee on Social Hygiene

The Committee on Social Hygiene has not held any meetings.

Through the co-ordination of welfare and health work, made possible by the change in administrative code of the state, there has been a marked increase in the continued medical care of indigent persons, and particularly children in indigent families, suffering from gonorrhea and syphilis. This has come about through the co-operative work of the Bureaus of Welfare, Institutional Service and Health. It seems to the chairman of this committee that the medical aspects of these diseases among the indigent have been more

effectively handled than ever before.

The educational work, because of lack of funds, has not been carried on to any extent. There is room and need for educational work. The Bureau of Health hopes to be able to do more along this line in the coming year than has been done recently.

GEORGE H. COOMBS,
Chairman.

Commercial Exhibitors

The exhibitors contribute generously to meet the expense of our annual meetings. It is, therefore, the *duty* of every physician at the coming meeting to visit these displays and to patronize these firms throughout the year.

General Electric X-Ray Corp., Boston; Geo. C. Frye Co., Portland; The Denver Chemical Mfg. Co., New York City; Surgeons' & Physicians' Supply Co., Boston; The P. J. Noyes Co., Lancaster, N. H.; Campbell X-Ray Co. of Boston; Davies, Rose & Co., Boston; Mellin's Food Co., Boston; Gerber Products Co., Fremont, Michigan; Elmer N. Blackwell, Portland; E. F. Mahady Company, Boston; G. S. Stoddard & Co., New York City; DePuy Manufacturing Co., Warsaw, Indiana; Hynson, Westcott & Dunning, Baltimore, Md.; Old Tavern Farm, Portland; Mead Johnson & Co., Evansville, Ind.; Cams, Brookhill Agency, Boston.

The Junior League of Portland will have an exhibit again this year from their Occupational Therapy Department. The great diversity of interests which occupational therapy presents to patients, both in the hospital and in their homes, will be illustrated.

*** IMPORTANT ***

Program: The usual program which has in past years been mailed to members will be omitted this year, as it was last. The complete program may be found in this issue. No further notice will be sent members.



**Massage and Mobilization in the Treatment of Recent Injury*

By SAMUEL H. KAGAN, M. D., Augusta, Maine

While Dr. Frederic J. Cotton, of Boston, first instilled into me the value of massage and mobilization in the after-treatment of bone injuries, it was not until I became associated with that master of the art, Dr. James B. Mennell, at the famous reconstruction hospital at Shepherds Bush, in London, that I became an enthusiast of massage and mobilization in the treatment of recent injury.

To see before your very eyes an arm or leg incapacitated and made useless by injury, and to feel muscles thickened and tender because of the infiltrating, swelling of extravasated blood, lymph and edema, the skin cold and without resilience, movements of joints gone—to have this picture change visibly under treatment by massage and mobilization to one of vitalized, resilient tissue, with edema and thickening gone, and increasing movement and function—this, I say, is the proof of the pudding.

To have a limb restored to functional activity during the healing period, rather than wait first for healing and then have to wait another period, fully as long—and often longer—of incapacity due to loss of function, is to save time, untold suffering and expense, and often psychological trauma.

As to the how and why of this, let me quote Dr. Mennell's favorite homily of the dog. "A dog whose leg is run over seeks some quiet spot, lies down, and begins to lick the injured leg with a slow, gentle, rhythmical movement, which is perfect because it is natural, and which should serve as a pattern to all masseurs. When nature prompts the animal thus to treat his injured limb—his treatment is not necessarily applied to a wound, as it is the same whether the skin be broken or not—and when we see that the slow, gentle, rhythmical massage brings him ease and comfort, and at the same time hastens recovery, why should we not copy as best we may and apply similar treatment to our injured fellow men?"

Dr. Mennell is an ardent disciple of Just Lucas-Championniere, who was, during his

lifetime, the most eminent champion of the use of massage and mobilization in the treatment of recent injury. His whole teaching was founded on the axiom of Aristotle—"movement is life." He advocated the reduction of immobilization to the minimum.

GENERAL PRINCIPLES OF MASSAGE TREATMENT

To use massage aright, we must consider it entirely as a means to an end, the end being restoration of function. Every movement performed should have this end in view.

There are two, and only two, possible effects of any movement of massage—reflex and mechanical.

1. *Reflex Action of Massage.*—Under the influence of massage, using only the lightest of stroking actions—so light that its effect cannot conceivably be due to mechanical causes—one sees pain and fatigue disappear and muscle spasm relax—this spasm, which causes shortening and deformity, so that the limb gradually lengthens as a result of muscle relaxation.

2. *Mechanical Action of Massage.*—The mechanical action of massage results from the use of a heavier pressure than is called for if we desire the reflex action only.

This mechanical action results from:

1. Assisting the circulation.
2. Assisting the movement of the lymph.
3. By action on tissues or some structure we hope to free or stretch.

1. *The Mechanical Effect of Massage on the Circulation:*

There are only two ways in which massage can produce a mechanical effect on the circulation. It may assist the venous return, or it may so act on the walls of the arterioles as to maintain or restore the tone of the vasomotor systems. By assisting the venous return we lessen the obstructive force or resistance in the arterioles, and the blood can then pass

through them more rapidly. It is also possible to cause a dilatation of the arterioles by paralyzing their muscular fibres, much in the same way that we can note a paralytic dilatation as a result of an ordinary bruise. The only differences are that the paralytic distension caused by massage is, or should be, very transient, while that due to bruising is far less so; and that after bruising there is a certain amount of actual extravasation of blood. The pathology is the same, and the healthy glow seen on the surface of the skin after percussion is due to paralytic dilatation of the skin vessels. If it is desired to cause a local hyperemia, it would seem easier and safer to attain our end by some other means than by the use of massage, as, for example, by heat in some form.

2. *The Effect of Massage on the Lymphatics:*

What has been said of massage as an agent to assist the vascular system applies no less strongly in its application for the benefit of the lymphatic system. Any toning up of the vasomotor system that we can produce, and any assistance that we can give to the venous return, must, of necessity, tend to prevent the formation of edema, and thus decrease any tendency to stagnation in the lymphatics. The pressure of lymph in the lymphatics is very low, and the lightest pressure is all that is required to assist the onflow of the lymph under normal conditions. Once edema is present, we have a pathological condition to combat. It is well to remember that it is often possible to reduce an intense edema by simple elevation, but this reduction is, of course, transitory. By massage we can assist the action of gravity very materially and can secure restoration of the tone of the vasomotor system. In edema of long standing and of that tough, doughy consistency, which is due to the lymph being partially clotted and resembling the consistency of thickened synovial fluid in long-standing synovitis, a heavier massage is required to break up the "clotted" lymph to render more fluid to pass through the minute stomata into the lymph channels. It is well to remember that edema, as usually met with in cases recommended for massage treatment, is not due to disease of the lymphatic system, but is merely a symptom that "something has gone wrong" with the circulatory system.

3. *Mechanical Effect of Massage in Stretching Tissue:*

There are two kinds of tissue, the result of pathological processes, which impede the restoration of functions. These are white fibrous and yellow elastic connective tissue. Sometimes we are also called upon to stretch certain normal tissues which have become shortened, owing to some pathological condition. The most common condition of this type is tendon insufficiency. With the bands of white fibrous connective tissue which require to be broken, massage can do little. These should be broken down by the surgeon only, and preferably under an anesthetic. The yellow elastic adhesion can rarely be dealt with in that way, and in massage treatment lies the chance of relief for the sufferer.

I do not intend to go into the technique of the various methods or movements of massage, as stroking, compression, percussion, kneading, etc.

As has already been stated, massage is merely a means to an end, the end being restoration of function. There are few cases in which massage treatment alone is able to attain it. In the treatment of a limb, massage alone rarely, if ever, suffices; mobilization, muscle movements are essential.

Mobilization consists of two main divisions:

1. Passive or relaxed movement.
2. Active or voluntary movement.

In passive movement, the movement must be carried through by the operator without any assistance or resistance from the patient. This requires the complete coöperation of the patient, who must become completely relaxed, particularly when a part is being moved. The difficulty in securing active relaxation is great. To obtain that it is essential that the patient be in a position of absolute ease and comfort. It is also essential that the operator himself be comfortable, so that he should be able to perform the necessary manipulations without strain to himself or loss of relaxation to the patient.

The aim of relaxed movement is to maintain muscle well-being, suppleness, to prevent contractions and formation of adhesions, or general matting of the soft tissues. "Little and often" should be our guide while performing such movement, and each movement

should be imperceptibly greater than the preceding. To secure the additional movement, no matter how slight it may be, is the chief aim in view. Any trace of pain or unevenness in our movement will defeat our purpose by calling up a protective muscular contraction.

Active movement consists of voluntary contraction of certain muscles or groups of muscles.

Few things are more injurious to muscular strength than absolute rest; it is surprising how little exercise will maintain strength. Even in the absence of joint movement, the performance of the natural function of a muscle—alternate contraction and relaxation—will often suffice, if not to prevent wasting, at least to minimize it.

At the outset, let it be clearly understood that in treating by massage a limb which has sustained a recent injury, the massage is applied only as a means of preparing the way for a dose of mobilization.

In treatment we aim by massage at restoring any disturbance of circulation, and thereby assist the repair of all injured structures. We render movement possible by massage, and so prevent the formation of adhesions, without interfering with repair of the injured tissues.

THE TREATMENT OF BRUISES, SPRAINS, TORN MUSCLES AND LIGAMENTS

The immediate action sought is to check effusion into the tissues, or, if it has already taken place, to disperse it before it has time to organize. This is done by hastening removal of the swelling and edema by massage, care being taken not to allow the damaged muscle to contract and start a hemorrhage again. Relaxed movement through small amplitude may be given, in the direction which is normally controlled by the injured muscle. It is desirable to commence the function of contraction with as little delay as possible after any portion has been torn. But here lies a difficulty: Contraction is essential, strain is most detrimental. By performing relaxed movements a muscle can be made to shorten and elongate to a certain extent without strain. Not only is contraction essential to the maintenance of muscular strength, but, after rupture of muscular fibres, it is essen-

tial to prevent the formation of adhesions. Once any muscle, or even a group of fibres within a muscle, becomes adherent to an adjacent group, trouble is sure to follow, and the stretching of the adhesions may be a prolonged and tedious process. It can be effected by the prescription of suitable exercises.

The amount of strain that can be placed with safety on a muscle that has suffered injury must depend upon the extent of the injury. The laborer who "strains" the muscles of his forearm slightly, puts on a leather wristlet, which acts as a block to his movement. Often this suffices. We, in the same way, strap joints—as the ankle, wrist, knee, etc.—to check the full range of muscular contraction, yet allow the vital contractility necessary for proper healing. To decide how much movement to give or how much use to prescribe, we are driven back to the golden rule of all treatment of recent injury, "that movement, active or passive, must be painless."

If a tendon is severely torn, so that few fibres only remain intact, the surgeon will be wise if he fixes the joints concerned during the period of repair. If massage is ordered, no movement of any joint should be allowed which cannot be controlled by the patient to the extent of fully restoring the position from which the movement started.

There is an anatomical law that every joint receives the same nerve supply as the muscles that control the movements of the joint. A pathological law seems to be that injury to a joint, which involves injury to its nerve supply—or at least irritation—produces a reflex wasting of the muscles controlling the movement of the joint. Treatment aims at restoring the circulation. The improvement in the circulation assists the repair of the joint, and by so doing limits the reflex wasting of the muscles. Mobilization effectively prevents the formation of adhesions.

Operation scars of recent date must always be treated with respect, and care must be taken not to tear the granulation tissue which holds the edges of the wound together. A scar is not organized completely for about three weeks; hence all movements of massage should tend to press the edges toward each other during that period.

Open wounds are treated like that of operative scars—the wound itself is avoided in treatment. In all post-operative treatment, massage should aim at relieving pain and restoring circulation. Mobilization should aim at teaching the muscles to contract, whether movement is possible or not.

The presence of sepsis is no contraindication to massage, but surface stroking only is permissible, and mobilization must be painless. The area of sepsis itself should be avoided.

Dislocations:

A dislocation, once it has been reduced, is only a severe form of sprain. The old treatment of these injuries consisted of prolonged rest, with absolute fixation, thus ignoring two vital facts: first, that by absolute rest the circulation in the part is reduced to a minimum, and second, that this immobilization causes a wasting of muscles. The better recognized treatment to-day is similar to that of sprains, already described.

Fractures:

Although the treatment of fractures by massage and mobilization is applicable in a

large number of cases from the outset, it is still rarely prescribed in the earliest stages. Until union is firm, no form of massage is permissible over the injured segments of the limb, save only the gentlest surface stroking; and even in performing this, the area of fracture must be omitted from the stroke. With many fractures light massage may begin as early as the third day, and may be repeated every 24-48 hours. Beginning as a mere stroking of the skin in the direction of the venous drainage, massage is gradually increased in force of application to include the deeper tissues, as it proves beneficial. As soon as union becomes firm, massage may be applied to the entire limb, and passive movements started with care. When union becomes complete, active movements can be gradually instituted.

Pain and swelling are Nature's protest against overdoing the treatment, and indicates the necessity of reducing these measures. It cannot be stated too emphatically that massage can do harm as well as good, and that the treatment of each case must be directed and controlled by the surgeon treating the case.

Dermoid Cyst of the Floor of the Mouth—Report of a Case

By HENRY P. JOHNSON, M. D., Portland, Maine

Dermoid cysts are seldom found in the floor of the mouth, although they are not infrequently encountered in the ear, nose, near the orbit, at the base of the skull, in the neck, sternum, mediastinum, ovary, testicle, bladder, scrotum and perineum. The majority of these tumors are congenital in origin, but may not be evident until well into middle life.

The origin of dermoids, according to Mikulicz, may be from the fusion of body cavities in the mid-line, through the closure of channels or clefts which, during fetal life, were covered with epithelium or through the abnormal deposits of epidermis in the tissues beneath it. Kaufmann has shown that epidermis sewed into the underlying tissue in animals will produce a rapidly developing atheromatous tumor. It is probable that most dermoid cysts in the floor of the mouth result

from some irregularity in the closure of the first and second branchial arches.

Dermoid cysts occurring in the floor of the mouth may be divided into the median cysts and the lateral cysts, according to their location. The former group is the more common. It is believed by some that those tumors found laterally placed were once median and were displaced to one side in the process of development. The median cysts are subdivided into the geniohyoid cysts, those resting upon the mylohyoid muscle, and the genioglossal cysts or sublingual dermoids, those resting upon geniohyoid muscle. The case to be presented here belongs to the latter group.

The tumors which belong to the sublingual or genioglossal group appear in the floor of the mouth as rounded or oval elevations. They are usually freely movable and are covered

with a normal mucous membrane, which is not attached to the tumor unless from scar tissue resulting from trauma. As they increase in size, the tongue is gradually displaced upward and backward toward the hard palate. If this continues, speech may be altered, and mastication and deglutition become difficult. There may be a dribbling of saliva in some instances if the tumor is not removed.

On palpation these tumors have a soft, doughy sensation not unlike a thick walled cyst. Their growth is rather slow, so that it is often many years before the tumor attains a size sufficiently large to cause any annoyance or inconvenience to the patient.

The capsule of the cyst is made up of tough connective tissue which feels resistant to the touch. The external wall is yellowish white in appearance, while the inside wall is quite smooth and rather shiny. There is some variation in the thickness of the walls. As a rule, dermoids have a lining membrane resembling skin, containing hair follicles, and sebaceous and sudoriferous glands. But, according to Colp, it is not uncommon to find dermoids lacking in some of the appendages of true skin. The epithelium of the cyst may be reduced to a few layers by the process of desquamation.

The contents of the cyst varies from a dirty brownish, mucoid fluid to a thick, white, oily sebaceous material with or without hair. Colp states that if a microscopic study were made of the contents, one might find desquamated epithelial cells, fat globules, cholesterolin and hair often of the lanugo type.

These dermoids must be differentiated from other tumors occurring in the floor of the mouth. Ranulas which are not congenital in origin are generally rapid in formation, fluctuation is easily obtained and a clear, watery fluid escapes if they are tapped. The angiomas are usually diagnosed by the dilated veins in the mucous membrane and in the absence of other positive physical findings. The lipomas may offer some difficulties in diagnosis. They are, however, never smooth, are usually less encapsulated and are not as freely movable.

The treatment of dermoid cysts in the floor of the mouth is surgical, and they must be removed *in toto* to prevent recurrence. Aspiration of the cyst and the injection of a

chemical irritant to destroy the lining membrane is obsolete. The method of approach is determined by the size and location of the cyst. The buccal route is the one of choice for the genioglossal cyst or sublingual dermoid.

REPORT OF A CASE

A man, age 25, was examined on January 12, 1931, because of a swelling under his tongue. He said that there had been a mass in the floor of his mouth as long as he could remember, but it caused him little trouble until about ten years ago, when it began to slowly increase in size. The growth became so large that it interfered with eating and talking. Three years ago it was opened and drained by his family physician. The swelling did not entirely disappear following the operation, and there was a discharging sinus under his tongue for several months. When the sinus stopped draining, the mass began to increase in size and grew more rapidly than it had previous to the operation. During the past year it has become so large that it impedes his speech and causes considerable trouble in eating. He complains of soreness on the edges, where it has been traumatized by his teeth.

Physical examination showed a soft, doughy, smooth, ovoid, cystic mass about 4 x 5 cm. bulging the floor of the mouth and crowding the tongue upward and backward against the palate. The surface was covered only by a thin, light pinkish mucous membrane. There were two ulcerations about 3 x 4 mm. in diameter on each lateral wall of the mass. On the anterior wall in the midline there was a thickening and scarring of the mucous membrane. This apparently was the site of the original incision for drainage and the subsequent sinus tract.

Operation:—On February 14, 1931, at the Maine General Hospital, under general anesthesia and a novocaine block, a cystic tumor about two inches in diameter was dissected from the floor of the mouth. It was rather firmly adherent to the mucous membrane at the site of the previous incision.

The following pathological report was submitted by Dr. Mortimer Warren from the Pathological Laboratory of the Maine General Hospital: The mass is 5 cm. in the

greatest diameter, irregularly spherical, yellowish pink, and fairly firm, with uneven but smooth surface, over which a number of small blood vessels ramify. On sectioning the mass, it has the appearance of a cyst filled with creamy material. This is not fat, but consists of many thin, irregular, colorless, scale-like objects, which microscopically suggest sloughed off, dead, epithelial cells, and abundant cholesterol crystals. The wall is about 5 mm. thick.

Microscopical:—The wall is lined with epithelium, which, although not typical stratified squamous, nevertheless, is composed of several layers which flatten at the surface. One logically may assume this to be the source of the dead cells in the contents of the cyst.

Diagnosis:—Sublingual dermoid cyst.

CONCLUSION

Surgical intervention for complete removal of the cyst is indicated in these cases. The method of approach depends upon the location of the tumor. When it is presenting in the floor of the mouth under the tongue, the buccal approach can be made more satisfactorily. But when the tumor is located below the mylohyoid muscle, the submental approach is usually the one of choice.

BIBLIOGRAPHY

Mikulicz. Quoted by Colp.

Kaufmann. Quoted by Colp.

Colp, Ralph. Dermoid Cysts of the Floor of the Mouth. *Surgery, Gynecology and Obstetrics*, 1925, XI, 183-195.

The Tonsil Problem

By FRANCIS W. HANLON, M. D., Brunswick, Maine

To many of the laity, and also among numerous general practitioners, the removal of tonsils and adenoids seems to be an overemphasized fad. In many of the medical schools too little stress is placed upon the diseases of the ear, nose and throat, and the young graduate, unless he has had special training in E. N. T. work, goes out into practice with a very limited knowledge of ear, nose and throat pathology in its relation to the body in general.

The tonsils and adenoids are lymphoid structures closely resembling Peyer's patches, but, instead of having a flattened surface, the lymphoid tissue is folded upon itself, forming depressions—the so called crypts. These crypts, like the surface of the tonsils, are lined by epithelial cells and contain lymphoid cells, desquamated epithelium, particles of food and bacteria. Under normal conditions the tonsils take no part in absorption from the mouth, but when the epithelium is diseased or removed, the tonsils and adenoids absorb with great facility every sort of poison which the mouth may contain. The toxic material absorbed by the tonsillar tissue is taken up by the lymphatic vessels, and

through them reaches the cervical lymph nodes, and finally may be carried into the general circulation, causing, in extreme cases, septicemia.

The most important chronic infection which takes place through the tonsils is that of tuberculosis. Of all children under observation in the Westchester County Preventorium of Grasslands Hospital during my residency, eight out of ten had a T. and A. even though there was no active disease, and in the short time that I had of observing them after operation, the beneficial effects, such as freedom from sore throats, contagious diseases, middle ear disease and diseases of the rheumatic cycle, were very marked.

Other chronic conditions that may arise from diseased tonsillar tissue are otitis media, secondary anemia, iritis, arthritis, chronic nasal discharge, asthma, ethmoidal and sphenoidal sinusitis and occasionally chest deformities.

The removal of tonsils and adenoids certainly prevents acute episodes, such as follicular tonsillitis, tonsillar abscesses, recurring attacks of croup in children and very often septic sore throat, and there is a grow-

ing belief among some observers that those who have had a T. and A. are less apt to contract measles, scarlet fever, diphtheria and the frequently overlooked condition of agranulocytic angina.

The question now arises — What tonsils shall we remove? It may be rather radical, but I believe that all very large spongy tonsils that nearly meet in the pharynx should be removed, whether they are causing trouble or not, as they are a potential source of danger in relation to eustachian catarrh and deafness. Soft, spongy, diseased tonsils, though not enlarged, should be operated on, particularly when they are associated with enlargement of the neck glands. Large embedded tonsils from which purulent exudate can be expressed certainly should be enucleated. In any case of chronic sepsis of obscure origin, the tonsils should be suspected and removed if any doubt exists as to the source of the infection.

This is especially important in cases of chronic arthritis and occasionally colitis, where a positive streptococcus culture can be obtained from the tonsils. With the improved technique in large hospitals a vaccine of autogenous nature can be made and great improvement of the chronic condition brought about.

Of the various operations at hand for the removal of tonsils and adenoids, complete enucleation is, in my opinion, the method of choice. In adults this can be done under general or local anesthesia, but in children general anesthesia is necessary, and every precaution must be taken to prevent aspiration of infected material into the lungs. With careful dissection the danger of serious hemorrhage is small, and I like to take a little longer than some and place a string gauze pack soaked in glycerite of tannic acid in each fossa and leave for the duration of the known clotting time and when removed any "spurters" that are present may be easily seen, clamped and tied.

I might add here that in children where it is found necessary to remove either tonsils or adenoids, the double operation (*i. e.*, T. and A.) is, in my opinion, better than doing either a tonsillectomy or adenoidectomy alone, as both are usually infected, and it

often saves the patient the inconvenience and danger of a second operation.

In conclusion, to those who consider T. and A. too much of a fad, I will agree that oftentimes tonsils removed from children whose rheumatic symptoms have occurred some time previous to operation, and who have old rheumatic heart lesions, seem to derive little benefit from the operation, and I also doubt, along with others, that prophylactic T. and A. aids much in preventing laryngitis, pneumonia, head colds and unexplained attacks of fever in children, but I do believe that far more tonsils are being left in that should come out than there are enucleated that should be left in.

Notices

Announcement

The Gyneccean Hospital Institute of Gynecologic Research of the University of Pennsylvania is conducting an intensive study of families into which congenitally malformed individuals have been born.

Special interest centers in families in which malformations have appeared in two or more children. Physicians who have knowledge of any such families are urged to communicate with:

DR. DOUGLAS P. MURPHY,
Gyneccean Hospital Institute, University
of Pennsylvania, Philadelphia, Pa.

Warning

As there are several "out-of-state" collection concerns soliciting accounts in the State of Maine, we would suggest that no member of our State Association turn over accounts for collection until after the meeting of the House of Delegates, in May.

We would also ask that any member having been "fleece" by a collection concern within the past two years, send to Dr. William Holt, 14 Deering Street, Portland, Me., any contract or material they have to offer as evidence, that we may investigate same before the annual meeting. Be sure to write your name on the outside of the envelope. All information will be confidential.

REBEKAH GARDNER,
Secretary.

The President's Page

TO THE MEMBERS OF THE MAINE MEDICAL ASSOCIATION:

Attention is called to the program of the Annual Meeting of the Association as printed in this and the last issue of the JOURNAL.

The conferences cover so many subjects and are so timed that any physician will find something interesting and instructive. These conferences last from 9 o'clock to 12.30 both Monday and Tuesday mornings.

Both afternoons are occupied with papers upon timely and interesting subjects. In order that this part of the program may not lag or become tiresome, your President will hold each paper to the specified time limit of twenty minutes. It is desired that all who are presenting papers see to it that they can be presented within the time limit, as they will be positively stopped at the end of their period. Those who discuss papers also will be held to their allotted time. To be indulgent in this matter in one case may be called a courtesy to that essayist, but it certainly is a discourtesy to the following essayist and such indulgence does prolong the session until restlessness and inattention are manifest. In order to be fair to all, it will be necessary to use all alike and allow no one to run over their allotted time.

In his last appearance on this page, your President wishes to express his appreciation for the uniform courtesy and spirit of helpfulness of the whole membership during the past year. It has been a real pleasure to visit the County Societies and to receive encouragement from the interest shown in Association matters. It would be an act of injustice not to express appreciation to all officers and committees of the Association who have, at all times, given unstintingly of their time and services. While it would be manifestly unfair to single out one officer or committee for a special praise at this time, I do want to call the membership's attention to the very great load placed upon the Scientific Committee of this Association. Theirs is not an easy task. It is a job requiring hours of work, immense amount of correspondence, hours of thought and time in travel before their completed task, the program, is brought to you and presented successfully at the meeting. I think that few of us are in a position to appreciate the complexities of the task allotted to this committee.

At the time of the last Annual Meeting the prospects were far from rosy for the immediate future of the Association. This was due to the funds of the Association being in closed banks, also the funds of several of the county secretaries were in closed banks. That we have come through that dark period speaks well for the judgment of the Council in their decision to carry on. To-day the affairs of the Association are in much better shape than a year ago. There are a few who still object to the dues. To those I wish to state that our state and county dues are way below the average for the country at large. There are many counties in the United States whose dues are as large or larger than our state dues. I am sorry that there are still some who feel that the dues are too high. I am equally sorry to say that, almost without exception, those who complain of the high dues are those who seldom, or never, attend the Association meetings. It is a self-evident fact that one who puts nothing into an organization in which they hold membership cannot get something out of it. We all need a vacation, so let's all head for Bangor for the 28th and 29th of May.

W. E. KERSHNER.

Maine Medical Association and Journal Treasurer's Report

MARCH 31, 1934

JORDAN & JORDAN
ACCOUNTANTS AND AUDITORS
Fidelity Building
Portland, - Maine

May 1, 1934.

MAINE MEDICAL ASSOCIATION AND JOURNAL,

Portland, Maine.

Gentlemen:—We respectfully report that we have completed our audit of your accounting records for the eleven months ended April 30, 1934, and have found the same complete and correct in all details of record. Statements annexed hereto are, in our opinion, properly drawn up to show the true financial position of the association April 30, 1934, and income and expense for the period under review.

Respectfully submitted,

JORDAN & JORDAN, *Accountants and Auditors.*

TREASURER'S REPORT OF MAINE MEDICAL ASSOCIATION AND JOURNAL

BALANCE SHEET, APRIL 30, 1934

ASSETS

Canal National Bank:		
Checking account,		\$ 5,012.22
Savings account,		433.98
Fidelity Trust Co., Robert Braun, Conservator:		
Checking accounts,		2,050.02
Savings account,		526.15
Dues receivable, 1934,		1,440.00
Advertising receivable,		79.50
Securities (cost)—(See schedule attached),		8,945.00
Furnishings and equipment,		510.87
Deferred expense—annual meeting, 1934,		2.40
Trust Fund investments—		
Prince A. Morrow Fund:		
12 shares American Agricultural Chemical Co. (cost),	\$ 348.00	
Thayer Library Fund:		
Savings account No. 3,903, Canal National Bank,	\$611.57	
Savings account No. 54,631, Fidelity Trust Co.,		
Robert Braun, Conservator,	741.46	
	—————	1,353.03
Social Hygiene Fund:		
Savings account No. 3,905, Canal National Bank,	\$110.14	
Savings account No. 54,236, Fidelity Trust Co.,		
Robert Braun, Conservator,	133.52	
	—————	243.66
		—————
Total fund investments,		1,944.69
		—————
Total Assets,		\$20,944.83



LIABILITIES

Deferred income:

Exhibit space, 1934 convention,	\$ 120.75
	<u>\$20,824.08</u>

TRUST FUNDS AND CAPITAL ACCOUNT

Trust No. 1—Prince A. Morrow Fund,	\$ 348.00
Trust No. 2—Thayer Library Fund,	\$1,229.72
Unexpended income,	123.31
	<u>1,353.03</u>
Trust No. 3—Social Hygiene Fund,	\$220.52
Unexpended income,	23.14
	<u>243.66</u>
Total trust funds,	\$ 1,944.69
Capital Account, April 30, 1934,	18,879.39
	<u>\$20,824.08</u>

CAPITAL ACCOUNT, APRIL 30, 1934

Maine Medical Association:

Balance June 1, 1933,	\$17,904.41
Deduct:—Partial salary May, 1933, paid this period,	60.00
	<u>\$17,844.41</u>
Add:—Revenue in excess of expense, 11 months,	1,614.57
	<u>\$19,458.98</u>

Maine Medical Journal:

Balance (deficit) June 1, 1933,	\$582.69
Deduct:—Revenue in excess of expense, 11 months,	3.10
	<u>579.59</u>
Balance April 30, 1934,	<u>\$18,879.39</u>

STATEMENT OF REVENUE AND EXPENSE, 11 MONTHS ENDED APRIL 30, 1934

REVENUE

	<i>Total</i>	<i>Association</i>	<i>Journal</i>
1934 dues subscribed,	\$5,232.00	\$5,232.00	
Income from securities,	327.50	327.50	
Interest received,	3.49	3.49	
Exhibit space, 1933 convention,	244.00	244.00	
C. M. A. B. advertising,	1,020.62		\$1,020.62
Local advertising,	1,401.99		1,401.99
Subscriptions and sales of JOURNALS,	10.00		10.00
Refunds,	45.35	23.80	21.55
	<u>\$8,284.95</u>	<u>\$5,830.79</u>	<u>\$2,454.16</u>
Total revenue,	\$8,284.95	\$5,830.79	\$2,454.16



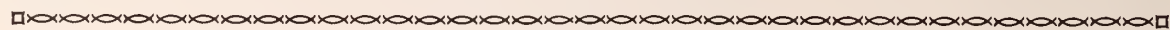
EXPENSE

Secretary's salary,	\$1,650.00	\$1,650.00	
President's salary,	100.00	100.00	
Office expenses :			
Salaries, assistants,	\$ 41.75	\$ 22.50	\$ 19.25
Supplies, stationery, etc.,	181.41	171.74	9.67
Postage and mailing expense,	162.53	78.47	84.06
Telephone and telegrams,	66.65	66.65	
Auditing,	42.61	42.61	
Safe deposit box rental,	6.68	6.68	
Miscellaneous,	19.85	19.50	.35
	\$ 521.48	\$ 408.15	\$ 113.33
Travel expense,	68.86	29.66	39.20
Committees,	25.00	25.00	
Councilors' expense,	8.55	8.55	
Delegate, A. M. A.,	105.00	105.00	
Clinics, Maine Public Health Association,	400.00	400.00	
Medical advisory committee,	550.00	550.00	
Annual meeting,	265.90	265.90	
Secretaries' meeting,	14.00	14.00	
Medals,	54.00	54.00	
Dues charged off (1933 dues unpaid),	602.00	602.00	
Check tax,	3.96	3.96	
Printing,	2,298.53		2,298.53
Total expense,	\$6,667.28	\$4,216.22	\$2,451.06
Revenue in excess of expense, 11 months,	\$1,617.67	\$1,614.57	\$3.10

STATEMENT OF CASH RECEIPTS AND DISBURSEMENTS, 11 MONTHS ENDED APRIL 30, 1934

RECEIPTS

Cash on hand, June 1, 1933 :			
Canal National Bank, checking account,	\$1,139.31	\$1,139.31	
Fidelity Trust Co., Robert Braun, Conservator :			
Checking account,	3,153.90	3,088.71	\$65.19
Savings account,	956.64	956.64	
	\$5,249.85	\$5,184.66	\$ 65.19
Received from dues, 1934,	3,792.00	3,792.00	
Received from dues, 1933,	2,014.00	2,014.00	
Income from securities,	327.50	327.50	
Interest received,	3.49	3.49	
County dues received,	2.00	2.00	
Exhibit space, 1934 convention,	120.75	120.75	
Exhibit space, 1933 convention,	244.00	244.00	
Advertising, local,	1,322.49		1,322.49
Advertising, C. M. A. B.,	1,020.62		1,020.62
Subscriptions and sale of JOURNAL,	10.00		10.00
Miscellaneous income, refunds, etc.,	72.67	51.12	21.55
Total,	\$14,179.37	\$11,739.52	\$2,439.85



DISBURSEMENTS

President's salary,	\$ 100.00	\$ 100.00	
Secretary's salary,	1,650.00	1,650.00	
Office expenses,	548.80	435.47	\$ 113.33
Travel expenses (Secretary's and Dr. Spalding's transportation to and from JOURNAL office),	68.86	29.66	39.20
Committees,	25.00	25.00	
Councilors' expenses,	8.55	8.55	
Clinics, Maine Public Health Association,	400.00	400.00	
Medical Advisory Committee,	550.00	550.00	
Annual meeting, 1933,	265.90	265.90	
Annual meeting, 1934,	2.40	2.40	
Secretaries' meetings,	14.00	14.00	
Medals,	54.00	54.00	
Refund, county dues,	2.00	2.00	
Check tax,	3.96	3.96	
Delegate, A. M. A.,	105.00	105.00	
Printing,	2,298.53		2,298.53
Salary, prior June 1, 1933,	60.00		60.00
Total,	\$6,157.00	\$3,645.94	\$2,511.06
Cash on hand April 30, 1934,	\$8,022.37	\$8,093.58	\$71.21
Canal National Bank:			
Checking account,	\$5,012.22	\$5,125.80	\$113.58
Savings account,	433.98	433.98	
Fidelity Trust Co., Robert Braum, Conservator:			
Checking accounts,	2,050.02	2,007.65	42.37
Savings account,	526.15	526.15	
	\$8,022.37	\$8,093.58	\$71.21

SECURITIES—BONDS, APRIL 30, 1934

		Cost	Market
2,000	The Mortgage Bond Co. of N. Y., Series 7, 5½'s, 1935 (defaulted),	\$2,000.00	\$ 800.00
2,000	Commonwealth of Australia, Ext. Loan, 30 years, 5's, 1957,	1,960.00	1,880.00
1,000	Prudence Bond Corp., 1st Mtg. Coll., Series 6, 5½'s, 1936 (defaulted),	1,000.00	350.00
3,000	Portland Terminal Co., 1st Mtg., 5's, 1961,	3,045.00	2,970.00
1,000	Shenango Valley Water Co., 1st Mtg. G. B., Series A, 5's, 1956,	940.00	820.00
		\$8,945.00	\$6,820.00

Necrology

Abner Oakes, South Berwick, 1905-1934

Dr. Oakes cut a finger slightly during an operation on the first day of October, 1933, and he died from pneumonia on the tenth day after. It was one of those sudden deaths to which every practicing surgeon daily exposes his life. Poor fellow member, we regret his passing from our ranks before he had real chances to prove his high and undoubted merit.

The son of an ancient family of South Berwick, young Abner was born in New York, where his father was a physician. After graduating from the Horace Mann School, Abner entered Dartmouth and was graduated in 1920. He followed on into medicine and obtained his degree at the University of Pennsylvania Medical School in 1930. He returned to the Dartmouth Medical School for two years of post-graduate study and settled in South Berwick in 1932.

Dr. Oakes made a fine beginning in medical practice, was highly thought of as a most promising young surgeon.

He married Miss Marjorie Allyn, of Montreal, and is survived by her and his mother, residing in New York City. Dr. Oakes died before he had made good the promises of his ancestry and personal worth as a man and physician.

J. A. S.

Notice

Dr. Kelley, Chief Medical Officer of the Veterans' Administration Facility, Augusta, Maine (Togus), wishes to announce that the profession of Maine are cordially invited to attend the staff meetings of that hospital. These meetings are held on the fourth Friday of each month at 7.30 P. M.

The May meeting will be on the evening of the 19th of May, in conjunction with the Kennebec County Medical Society meeting.

County News and Notes *Cumberland*

The meeting of the Cumberland County Medical Society was held at the Eastland Hotel.

Meeting called to order by President E. E. Holt.

The minutes of the last meeting read and accepted.

Dr. Woodman presented resolutions on the death of Dr. B. D. Ridlon and Dr. Tobie on the death of Dr. A. O. Shaw. It was voted that these resolutions be accepted, spread upon the records of the society, and a copy sent to their families.

The following committees were appointed to draw up resolutions on the death of Dr. C. A. Baker, Honorary Member, and Dr. L. B. Marshall: Dr. Owen Smith and Dr. H. S. Emery on Dr. Baker; Dr. Thomas Foster and Dr. H. E. Davis for Dr. Marshall.

The following committee, consisting of Dr. Ruhlin, Chairman, Dr. Heifetz and Dr. Greco, was appointed to communicate with a committee from the Portland Medical Society for a joint outing sometime in June.

A motion was made by Dr. Foster, and seconded, that the present Committee on Outside Relations be increased from its present number of three to seven, and the Chair nominated Drs. Thomas Foster, C. B. Sylvester, G. O. Cummings and Elton Blaisdell to act as the additional members of this committee.

Mr. George Hersey, Manager of the Portland Credit Men's Association, took several minutes to explain why a credit association should be used and that it was possible now for the doctors to obtain this service for \$15.00 instead of the customary fee of \$30.00. He did, however, neglect to point out that it was the purpose of the Association to form a department which would be of especial interest to physicians and dentists, and that information desired by these professions would be available upon request.

Dr. Kershner, President of the Maine Medical Association, was our guest.

The paper of the evening was delivered by Dr. Theodore S. Moise, of Bangor, and his subject was "Surgical Treatment of Pulmonary Tuberculosis." This was a new subject to the society as a whole, and was delivered in a most complete and interesting manner. The paper was supplemented by X-ray films and lantern slides. Drs. Sylvester, Greco, Meisenbach, Gehring and Emery took part in the general discussion that followed.

A German supper was substituted for the regular expected meal and was perhaps enjoyed by a few.

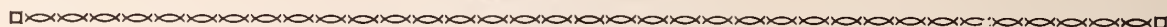
The usual afternoon clinic was omitted, because of repairs at the Eye and Ear Infirmary.

The meeting adjourned at 10.00 o'clock.

Respectfully,

WILLIAM HOLT,

Secretary.



Cumberland

The Committee of Outside Relations of the Cumberland County Medical Society considered a request from the Maine Congress of Parents and Teachers, Inc., for the establishment of free clinics in Portland for the discovery and remedial correction of physical defects in children of pre-school age.

This committee begs to make the following recommendation:

The Cumberland County Medical Society recognizes fully the merit of any movement which has for its object the conservation of child health and the remedial correction of the physical defects of childhood.

In the examination of children of pre-school age, this society firmly believes that the family physician should make such examination, and, concurring with the school authorities, fill out and sign a proper certificate of health before the child is admitted to the schools.

In the case of children whose parents are unable to pay for such examination, free clinics already existing in Portland can render the necessary service.

The Committee of Outside Relations recommends to the Council that a copy of these resolutions be sent to each member of the society.

LUTHER A. BROWN,
Chairman.

Portland Medical Club

The regular monthly meeting of the Portland Medical Club was held at the Columbia Hotel on Tuesday evening, April 3rd, at 8.00 P. M.

Dr. R. S. Hawkes presented a well-organized and instructive paper on "The Role of Liver, Iron and Copper in the Treatment of Certain Anemias."

ALICE WHITTIER, M. D.,
Secretary.

A New Medical Reference Library

At a recent meeting of the Portland Medical Club it was decided to consider the establishment of a Medical Reference Library for the use of Portland and surrounding towns. A committee, consisting of Dr. Roland O. Meisenbach, chairman, Dr. William Holt and Dr. Eugene O'Donnell, was appointed to report the progress from time to time. It was considered advisable to have the library conveniently located, and, following the example of other cities, it was decided to have it in the Portland Public Library. The library authorities

were consulted and have offered their co-operation. Many of the profession have already donated volumes for the new library. The committee will be glad to accept any material in the form of books appropriate for a reference library.

Hancock

The first meeting of the year was held by the Hancock County Medical Society at the Hancock House, Ellsworth, Maine, on Wednesday night, April 25th, 1934.

Dr. George A. Parcher, county chairman for the National Child Health Program, reported on the progress in Hancock County and the amount of work which has been done.

Resolutions were presented for permanent record expressing the unanimous appreciation of the Hancock County Society for the faithful and conscientious work performed by Dr. George A. Neal, of Southwest Harbor, Maine, whose resignation as Secretary-Treasurer of the organization, in December, 1933, terminated this long and usually thankless service.

The following papers were read:

(1) "Medico-Legal Problems as Applied to the General Medical Man," by Dr. John G. Towne, Waterville, Maine.

(2) "Psychiatric Problems, Border-line in Nature, and the Neuroses," by Dr. Carl J. Hedin, Bangor, Maine.

Both papers evoked much interesting and educational discussion and many pertinent questions.

Dr. John L. Johnson, Bangor, Maine, spoke briefly but very enthusiastically regarding the general change in insurance policies for malpractice coverage which are now being handled by the Casualty Group. He enumerated the benefits we may expect by group co-operation in matters of this nature. Dr. W. E. Kershner, President of the Maine Medical Association, very briefly substantiated Dr. Johnson's remarks.

Dinner was served in the dining room of the hotel at 10.45 P. M., following which Dr. Kershner addressed us on the value of the M. M. A. to each practicing physician and explained much of the work which is now being done officially.

Eighteen physicians were present.

RAYMOND E. WEYMOUTH, M. D.,
Secretary.

Kennebec

The meeting of the Kennebec County Medical Association was held at the Elmwood Hotel in Waterville, Thursday afternoon and evening, April 19, 1934.

A Clinical Session was held at 4.30 P. M., which was presided over by Dr. George W. Alexander, President.

Clinical Program:

1. "Poliomyelitis," by Dr. W. W. Hendee.
2. "Skin Reactions for Brucella Abortus," by Dr. C. S. Bauman.
3. "Ovarian Fibroid," by Dr. R. L. Reynolds.
4. (a) Abdominal Pregnancy,
(b) Bilateral Ovarian Cysts, by Dr. L. A. Guite.
5. "Ocular Disturbance of Brain Tumor," by Dr. H. F. Hill.
6. (a) Rupture of Urethra,
(b) Stricture of Ureter, by Dr. A. B. Allen.
7. (a) Renal Calculus,
(b) Carcinoma of Stomach, by Dr. B. I. Wulff.
8. "Mastoiditis with Lateral Sinus Thrombosis," by Dr. T. C. McCoy.
9. "Hiccough Secondary to Dilated Aorta," by Dr. J. O. Piper.
10. "Constipating Effect of Public Schools," by Dr. B. O. Goodrich.
11. "Extensive Burns of Legs," by Dr. J. G. Towne.
12. "The Use of the Duodenal Tube," by Dr. E. H. Risley.
13. "Unusual Foreign Body in Esophagus," by Dr. F. T. Hill.

6.30 P. M., dinner.

7.30 P. M., business meeting.

The minutes of the last meeting were read and approved.

The following papers were read:

"The Treatment of Chronic Deafness, Not an Otological Problem Alone," by Dr. Frederick T. Hill. This paper was discussed by Dr. W. E. Ellingwood, of Rockland, and Dr. J. O. Piper, of Waterville.

"The Prostate Gland," by Dr. C. Harold Jamieson, Rockland. Discussion by Dr. A. B. Allen, of Waterville.

These papers were ably presented and brought out a great deal of discussion.

There were forty-one members present.

Respectfully submitted,

FREDERICK R. CARTER,
Secretary.

Knox

The Knox County Medical Society met on Tuesday, April 10th, at the Thorndike Hotel in Rockland.

Doctor John O. Piper, of Waterville, presented a very interesting paper on "Spontaneous Subdural Hemorrhage," which was followed by open discussion.

Plans were laid for putting into operation a fee schedule under the F. E. R. A.

We were glad to see Doctor F. T. Hill with us again.

JAMES CARSWELL, JR.,
Secretary-Treasurer.

Oxford

The annual meeting of the Oxford County Medical Association was held at Bethel Inn, Bethel, Maine, May 2, 1934.

The business meeting was called to order by the President, R. E. Hubbard, of Waterford. Dr. J. S. Sturtevant was made an honorary member by reason of fifty years of medical practice. Dr. C. W. Nelson, Norway, was elected President; Dr. Edwin Kay, West Paris, Vice President; Dr. J. S. Sturtevant, Dixfield, Secretary-Treasurer; Dr. J. G. Littlefield, South Paris, Councilor for three years; Dr. J. A. MacDougall, Rumford, delegate to M. M. A. for two years; Dr. H. M. Howard, Rumford, alternate to M. M. A. for two years.

The banquet was at 6.30. Sixteen members and thirteen guests were present. After dinner Dr. Lester Adams, Superintendent of the Western Maine Sanatorium, gave a very interesting talk on "The Childhood Type of Tuberculosis," with X-ray pictures.

DR. J. S. STURTEVANT, *Secretary.*

Sagadahoc

The annual meeting of the Sagadahoc County Medical Society was held at Hotel Phoenix, at Bath, Maine, April 18, 1934, Dr. A. F. Williams presiding.

Members present: Dr. A. F. Williams, Dr. A. A. Stott, Dr. Pratt, Dr. R. R. Heffner, Dr. L. T. Snipe, Dr. Day, Dr. Winchenbach, Dr. W. E. Kershner. Guests were Dr. E. W. Gehring, President-Elect Maine Medical Association, Dr. Wm. Ellingwood, of Rockland, Councilor for this District.

Dinner was served at 6.30 P. M., followed by the business meeting.

Officers were all re-elected as follows:

President, Dr. A. F. Williams.

Vice-President, Dr. A. A. Stott.

Secretary and Treasurer, Dr. W. E. Kershner.

Councilors, Dr. D. S. Day, Dr. E. M. Fuller and Dr. H. D. Grant.

Delegate to the State Association, Dr. E. F. Pratt.

Dr. Heffner, of Richmond, was elected to membership.

Dr. Gehring made some remarks on Maine medical matters of importance and asked the society to endorse in principle the contraception movement and to approve proposed amendments to the Federal Statutes which will allow legal dissemination of contraception information. The society so moved.

Dr. Ellingwood, our Councilor, spoke of the state meeting programs and of the importance of a large attendance at the Annual Meeting. The society voted approval of the holding of annual meetings at resort hotels and also approved the holding of clinical session or sessions between annual meetings.

The paper of the evening was presented by Dr. Dix, on "Mental States." Dr. Dix is a very easy and effective speaker, and his paper provoked free discussion. Dr. Dix is in charge of the mental and nervous diseases department at the hospital at Togus.

W. E. KERSHNER,
Secretary.

Correspondence

The following letter has been received from Headquarters First Corps Area, Office of the Corps Area Surgeon.

ARMY BASE, BOSTON, MASS.

My dear Miss Gardner:

A revision of the list of Majors, Captains and Lieutenants of the Medical Corps of the Reserve who are willing to accept a tour of duty with the Civilian Conservation Corps, normally for a period of six months or longer but not less than 60 days, is being made.

An additional list of private physicians who are willing to accept a contract for a six months' period duty with the Civilian Conservation Corps is also desired. The pay of a Contract Physician, full time, is about \$190.97. These figures are subject to change, but no applicant will be ordered to duty without being fully advised in advance.

Since the money allowance for medical service is extremely limited, it is suggested that reserve officers above the grade of 1st Lieutenant who would be willing to serve as Contract Physicians fill out both applications.

Very truly yours,

G. M. EKWURZEL,
Colonel, M. C.,
Corps Area Surgeon.

Application forms may be secured through the JOURNAL office.

Books Received and Reviewed

Review of "The Story of Childbirth," by Palmer Findley, of Omaha. Publishers, Doubleday, Doran.

Dr. Findley, in his "Story of Childbirth," has collected a great deal of interesting material. In fact, he is embarrassed by the amount of obstetrical esoterica at his command. The story is written in his inimitable manner and only as Dr. Findley could write it.

He attempts to give an anthropological survey in rather too small a space. However, after the first third of the book Dr. Findley succeeds in weaving his varied and numerous bits of information into a very coherent body of material.

Of especial interest to the layman are the chapters on the history of the use of anesthetics in labor, and the discovery of the cause of childbed fever.

Dr. Findley strikes hard at modern American obstetrics, deploring the frequency of interfering with the natural process of labor, and unnecessarily resorting to Cesarean sections.

The illustrations add greatly to the value of the book. They have been culled from many sources, ancient, mediæval and modern.

Taken as a whole it is an absorbing book, told sympathetically and with occasional touches of delightful humour. Several chapters of advice to expectant mothers make the book of practical as well as historical value.

I recommend its reading.

ADAM P. LEIGHTON, JR., M. D.

We are glad to acknowledge Green's Eye Hospital Bulletin of Practical Ophthalmology, Vol. 4, Jan-Apr., 1934, San Francisco. Three papers attract unusual attention: "Ocular Tuberculosis—Its Diagnosis and Therapy," "Detachment of the Retina," and "The Modern Operation for Senile Cataract." To them we commend attention on the part of our readers interested in modern eye surgery.

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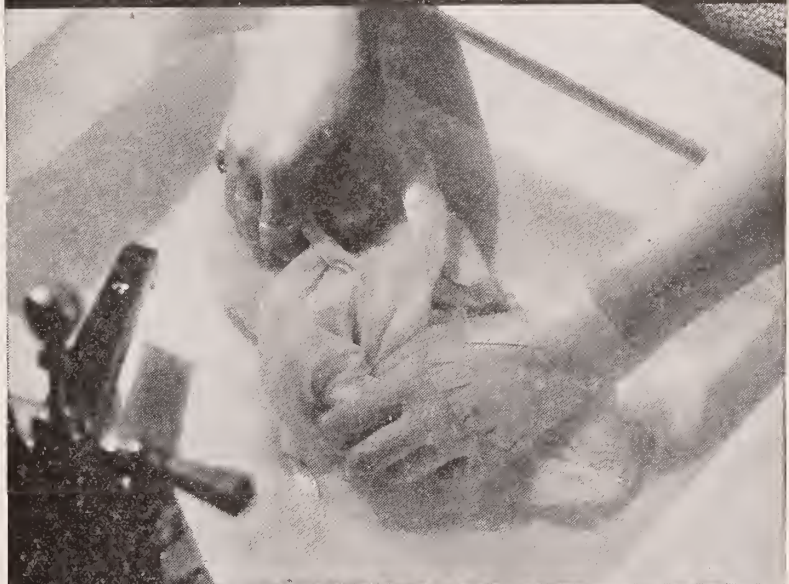
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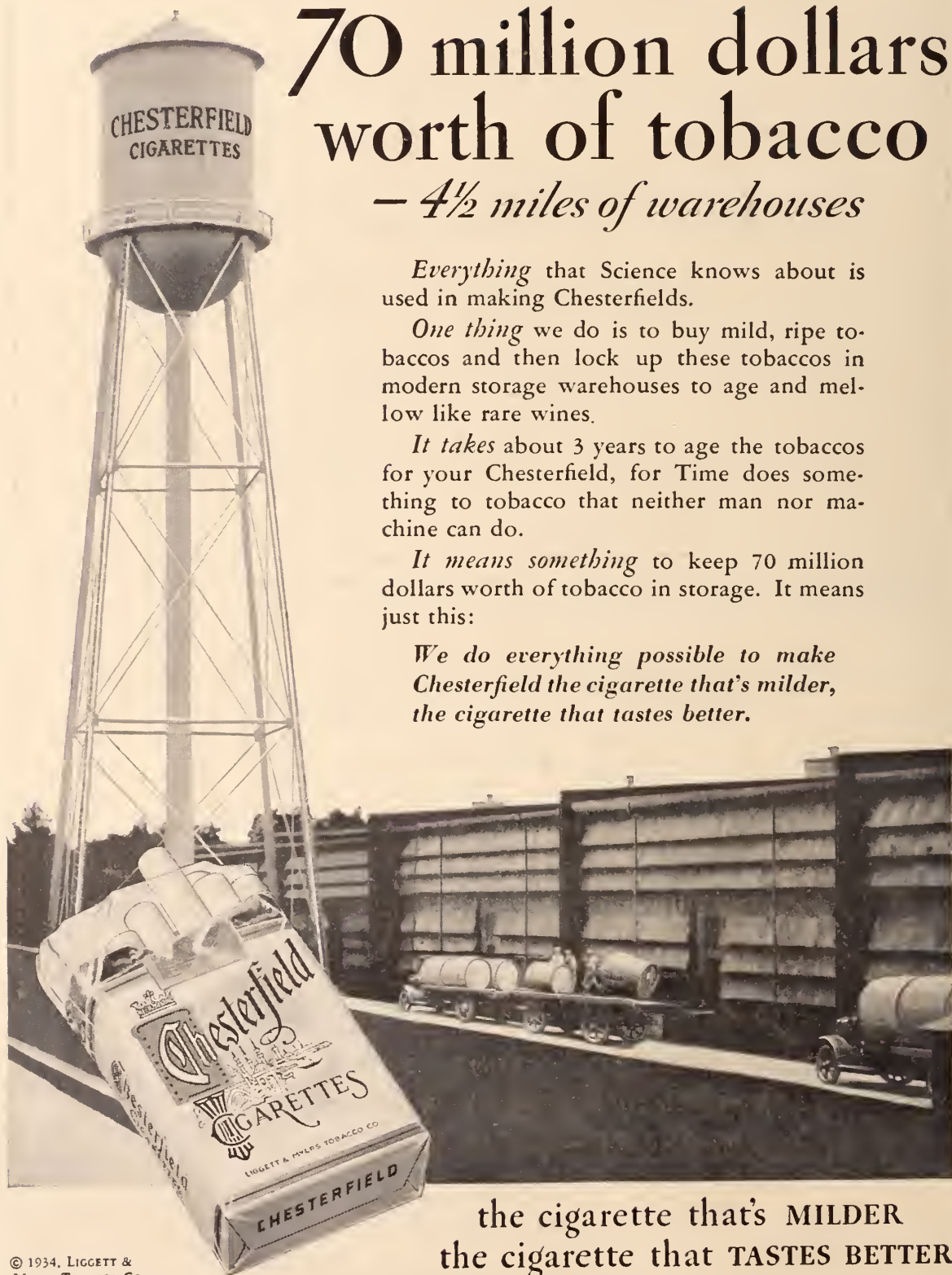
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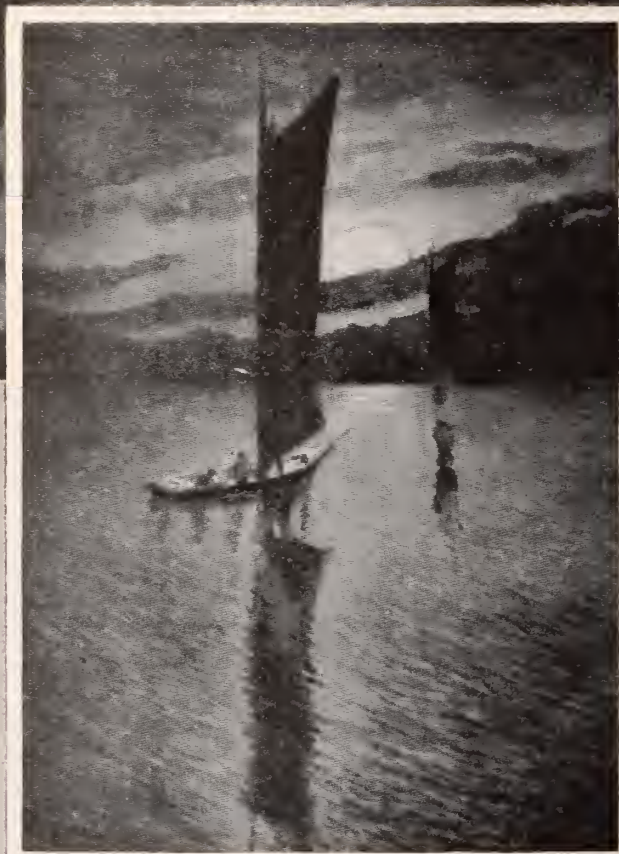
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Editorials

Eighty-second Annual Meeting

The Eighty-second Annual Meeting of the Maine Medical Association proved to be one of the most successful ever held and brought to a fitting close an active and progressive year under the leadership of Dr. W. E. Kershner. The last few years have shown a gradual but constant development in the scientific work of the Association, a definite trend toward more emphasis upon the educational side. This has been manifested not only in the annual meetings but, to an appreciable extent, in the meetings of the constituent County societies as well. This has awakened a greater interest in the work of the Association, especially among many of the younger members, who have found inspiration and help in the programs presented. Dr. Kershner's administration has undoubtedly carried this idea to a greater development than has been previously possible. He has been able to build upon the foundation previously laid, and now our new President, Dr. E. W. Gehring, will advance still further, utilizing all the momentum gathered.

Two hundred and thirty-seven members were registered at the Bangor meeting. There can be little doubt that each and every one of these found something there which made his attendance worth while. Enthusiastic comments from many bear out this statement.

The innovation of holding the first meeting of the House of Delegates on Sunday evening seemed a popular move, as it enabled members to save a day by coming Sunday. The business of the House of Delegates was transacted expeditiously and efficiently under the chairmanship of Dr. Gehring. While naturally there were some differences of opinion, harmony prevailed, and the final decisions were agreeable to all. One move, of considerable importance to the Association, was the decision that, in the future, the annual meeting be held in some resort hotel, and that several clinical sessions be held during the year in the various hospital centers sponsored by the Association.

More interest than ever before was manifested in the conferences. Each of the forty was well attended. Each leader presented his subject in an interesting way, showing a proper appreciation of its various aspects, and encouraging free and frank discussions. The value of these conferences from the educational side is becoming more apparent each year. This year, in addition to the review conferences in Ophthalmology and Oto-laryngology, as presented last year, review conferences were given in Medicine, Surgery and Pediatrics. There have been requests another year for similar conferences in Obstetrics, Gynecology and in Neuro-Psychiatry. These review conferences should soon

become the most valuable feature of the meeting.

The Association was highly honored this year by having, as its guest speaker, Dr. Dean Lewis, President of the American Medical Association and Professor of Surgery at Johns Hopkins. Needless to say, Dr. Lewis brought a valuable message to Maine medicine. His paper on "Differential Diagnosis of Breast Tumors" was a wonderful contribution. Speaking later at the banquet, he held his audience spellbound by his masterful analysis of the present economic condition, as it affects medicine.

All of the seven clinical papers presented at the afternoon sessions were worthy of a place on any program. They showed careful preparation, original thought and were well received. Discussions were to the point. A great deal of the success of these sessions was due to the policy of the presiding officer, Dr. Kershner, in strictly adhering to the rule of limiting papers to twenty minutes. This prevented the program dragging and allowed adjournment before the audience became unduly tired. It was interesting to note that there were quite as many men present for the last papers as at the beginning, in contrast to some previous years when this rule was not enforced.

While the Scientific Exhibit was small it was extremely good. The heart exhibit from the Evans Memorial was especially worthy of note. It is hoped that as time goes on, this department of the annual session will develop to greater proportions. Each hospital group in the state should plan to contribute something worth while, starting early in the year to prepare it.

The Commercial Exhibit was the best for years. Not only was all available space sold, but it was used to good advantage, both from the point of view of the exhibitors and from that of the members, who were enabled to get in touch with many recent developments pertaining to the practice of medicine.

The Secretaries' luncheon this year was much better attended than last year. This not only gives the Secretaries an opportunity of getting together and exchanging ideas, but enables the incoming officers to express to

the Secretaries their plans and policies for the ensuing year. A new feature this year was the luncheon for Past-Presidents, and this was a great success. All but five of the living Past-Presidents were present. This must become an annual event and should be productive of much good. In honor of Dr. Dean Lewis a luncheon for all Johns Hopkins graduates was held and this proved very successful. It would seem desirable to hold similar group reunions for graduates of other schools at future meetings.

The Bangor men lived up to their reputations as genial hosts and royal entertainers throughout the session. Open house was held at several homes, and all found a spirit of hospitality everywhere. Social affairs were provided for the ladies throughout the session, and all agreed that the hosts left nothing undone for their entertainment. The session was brought to a close on Tuesday night by the annual banquet, at which over two hundred doctors and their wives sat down to a most enjoyable dinner, following which they had the pleasure of listening to Dr. Kershner's account of his stewardship. The fifty year gold medals were presented to Drs. Heald, Hale, Moulton and Startevant, who responded appropriately. Dr. Lewis gave his inspiring address, and then Dr. Kershner presented the new President-elect, Dr. J. L. Johnson, of Bangor, unanimously elected the preceding afternoon. Following this, Dr. Kershner turned over the meeting to the new President, Dr. E. W. Gehring. After expressing his appreciation of the honor conferred upon him, Dr. Gehring, on behalf of the Association, presented to Dr. Kershner a beautifully engraved gavel as a slight token of the esteem and regard engendered by his long and faithful service to the Association and to medicine.

Thus came to a close the eighty-second meeting. To make the eighty-third even more successful will demand the coöperation and attendance of those who, for some reason or another, were not present this year. Let's all get behind our new officers and try to accomplish this.

F. T. H.



State Medicine

Along with other lines of endeavor, the American medical profession faces a somewhat uncertain future. This uncertainty is due largely to changing economic and sociological conditions initiated by a world-wide crisis. Europe for years has experimented with various forms of medical insurance, and with results that in nowise has been conducive to either the best interests of the profession or the public. Now, due to present economic conditions, there has been raised a clamor in various parts of the country for some form or other of state medicine. In a period when so much experimentation in government is the order of the day, it is perfectly possible that some scheme of state medicine might be hastily or unadvisedly adopted that would work lasting harm to the profession. It is therefore evident that we must be on guard to combat, as a body, any unwise legislation, either local or national, that might

be attempted, and it is further evident that only by the unanimous and whole-hearted support of the state and national societies can the medical profession make its power felt in defeating any plan of medical care that would be inimical to the best interest of the profession and the public it serves.

J. R. H.

Editorial Notes

The Transactions of the House of Delegates will appear in a condensed form in the July issue.

We are presenting in this issue of the JOURNAL material from the Cancer Program offered by the Kennebec County Medical Society this spring, which we hope will be of interest to all our readers.

*Hypertension and Kidney Disease

By E. R. BLAISDELL, M. D., F. A. C. P., Portland, Maine

In speaking of hypertension and kidney disease, one should include benign and malignant hypertension, glomerular nephritis, nephro-sclerosis or chronic contracted kidney and pyelitis or pyelonephritis. These diseases head our mortality lists to-day. However, only a part of this increase is actual. A certain percentage is due to better diagnosis, especially in heart disease, in which we now have a more definite understanding of coronary artery disease and have discarded that useless term "acute indigestion." Furthermore, due to better sanitary conditions and better control of contagious diseases, a greater number of our people are living beyond fifty years of age, when vascular disorders are more common.

A great deal of time and money has been spent, with remarkably good results, in the control of contagious diseases, but very little stress has been placed upon the reduction of the morbidity and mortality rates in renal

vascular diseases. Many times we are compelled to wait until our patient has acute heart failure or perhaps a coronary thrombosis before we can create much enthusiasm as far as treatment is concerned. It would be much better for our health organizations to educate the public in the same manner in which they have accomplished so much in the control of scarlet fever, typhoid fever, diphtheria and tuberculosis. I must admit that periodic health examinations are advocated, but this is not enough. It is only a beginning. The public can conscientiously be told that high blood pressure and kidney disease are not necessarily fatal diseases, and if proper treatment is carried out there will be little chance that death will result from them. Although this statement may meet with considerable opposition from the medical profession, I believe that it is true. For several years I have been interested in renal vascular diseases and have followed a fair number of

* Read before the Portland Medical Club, October, 1932.

patients with moderately advanced kidney lesions, and am convinced that the majority are only slightly progressive if properly treated.

Now, what will we do for the intelligent patient who will co-operate with us? Let us first consider the so-called benign or essential hypertension. This is really one of our big problems. Too frequent examinations, especially for the nervous individual, after a definite course of treatment has been decided upon, is not advisable. Will we or will we not tell the patient what his blood pressure is? I think it best not to lie to the patient. On the other hand, it would seem better to have an early understanding, informing him that the less said about blood pressure the better the results will be, and that experience has taught us that blood pressure readings are only valuable for the physician, as the level changes so frequently from hour to hour that any attempt at interpretation by the patient is useless and harmful. Naturally, one will occasionally lose a good patient by this procedure, but only rarely if tact is used. Remember that the patient who says that he is prepared to hear the worst is usually ready to faint when told that his blood pressure is a few points higher than he thinks it should be. As to the treatment of essential hypertension, so much has been written concerning it during the past ten years that one almost hesitates to say much about it. Removal of focal infections, drugs, special diets and rest have been advocated, and all of these, even rest, have been condemned by some writers. Let us remember that essential hypertension is frequently a familial disease, commonly occurring in those who have a hypersensitive vasomotor system, that it is chronic, and in spite of it the patient may live for many years. We should also remember that heart disease is the most common cause of death in patients who have renal vascular pathology. The removal of focal infections is advisable. Short periods of bed rest are frequently beneficial. Overeating is to be discouraged. Salt-free diet is especially beneficial if heart failure and edema are present. In those with retinal edema, even though albuminuria or elevated blood nitrogen may be absent, serious kidney damage is usually present. It is here that salt-free diet is extremely useful. I

have several such patients, referred to me by ophthalmologists, in whom the beneficial results of salt-free diet are simply astonishing. For example: A man, age 48, with a blood pressure of 230/130 was first seen in November, 1931. There had been a gradual loss of sight for the past six months, and when first seen the vision was only 20/200 in both eyes. In March, 1932, it had improved to 20/60 and in August, 1932, it was 20/30. Although there was marked improvement in vision, there was practically no change in the blood pressure and the patient died of cerebral apoplexy in the early part of September. Another, a woman, age 55, was first seen in September, 1930. At this time the vision was finger shadows only in the right eye and 20/200 in the left eye. The blood pressure was 190/100. One month later the vision was 20/200 in both eyes and the blood pressure was 170/90. There was gradual improvement, and when seen one year later the vision was 20/40 in both eyes and the blood pressure was 155/80. During the summer of 1932 her condition remained the same. Rest is also an important aid in treatment. Eight hours of rest at night should be insisted upon, and a brief rest period after lunch is often of great benefit. In order to establish this habit, a small dose of luminal for a time, before lunch, is helpful. As heart disease is such a constant complication of hypertension, only moderate exercise should be recommended. I am in complete accordance with Dr. Samuel Levine when he says that the lazy man lives the longest, providing he can control his waist line. So frequently we hear the exercise enthusiast boasting of his wonderful muscular structure, which he has developed after middle age, only to read within a short time of his death from acute heart disease. On the other hand, there is no objection to graded exercise to suit the individual case. The patient should simply practice moderation in everything. An occasional blood chemistry examination should not be neglected. Many cases of mild diabetes mellitus develop during the course of hypertension. Pathologists have shown us an interesting connection between hypertension and visceral arterio-sclerosis. They have demonstrated that the liver and spleen are the first to show vessel sclerosis, and that the next

organ to become affected is the pancreas. Sclerosis of the arteries of the liver and spleen give us no clinical findings, but disturbance of the circulation of the pancreas frequently produces disturbance of carbohydrate metabolism. High carbohydrate, low fat diets, with insulin, if necessary, will prevent high blood fat, which is now recognized as a probable cause of arterial degeneration in the diabetic.

Malignant hypertension is simply an accelerated essential hypertension. The velocity of the production of vessel sclerosis is much more rapid than in the so-called benign hypertension. The amount of sclerosis which usually takes place within fifteen or twenty years in the latter form is found in the more malignant types within three to six years. In fact, the length of life is so short that the heart is well able to stand the increased blood pressure over the relatively short period, and death usually results from apoplexy or kidney insufficiency. It is a disease of young adult life. Even here, treatment is not without some value. The removal of focal infections, proper rest and frequent blood chemistry examinations, with a proper adjustment of diet, will add, in many cases, to the relative expectancy of life. Caution should be used in prescribing salt-free diet for such patients, as early nitrogen retention is common and if the protein intake is not watched uremia may be precipitated.

Glomerular nephritis may be subdivided into acute primary glomerular, acute secondary glomerular and chronic glomerular. The term focal nephritis is frequently used to describe a nephritis which only involves a small portion of the vascular structure of the kidney. It is a poor term and some authors prefer to discourage its use, as it cannot, in most instances, be clinically differentiated from the diffuse form. A great deal has been accomplished in the prevention of glomerular nephritis. Therapeutic scarlet fever serum, the more frequent urine examinations made during and following acute infections and the much-talked-about "wholesale" removal of focal infections have all been helpful in reducing the incidence of kidney complications. It would seem reasonable to state that an albuminuria, developing during the course of an acute infection, which persists after the

temperature has returned to normal, is sufficient evidence to keep the patient in bed a reasonable length of time in an attempt to clear it up.

Acute hemorrhagic nephritis, although not usually classified as glomerular nephritis, is in reality an acute hemorrhagic disease of the glomeruli. It is of acute focal origin, often fatal and not infrequently terminates in an acute diffuse malignant type of nephritis. The removal of infected teeth or septic tonsils, blood transfusions and special modifications of the diet may all help to halt the disease, but this is not the usual result. More often, the patient dies within a year. During the past year, a patient of mine, 23 years of age, developed a hemorrhagic nephritis following an infected tooth and a peritonsillar abscess. The tooth was removed, a tonsillectomy was performed six weeks after the tonsillitis, and she was transfused several times, all of which failed to have any effect upon the kidney condition, and death occurred eight months later from uremia.

We are all familiar with the symptoms and clinical findings in acute primary glomerular nephritis. The patient may appear desperately ill, but usually recovers from the acute attack. The kidney may apparently entirely heal or the disease may terminate in chronic diffuse nephritis. Acute nephritis of pregnancy, which is usually also associated with nephrosis, is more likely to result in chronic kidney damage. I believe that such patients should be kept in bed for a considerable length of time after confinement, especially if retinal edema persists for more than a week after delivery.

Acute secondary glomerular nephritis is an acute inflammatory process superimposed upon a chronic nephritis. Unlike the acute primary form, there is very little increase in the specific gravity of the urine and edema is frequently absent. There may be very little elevation of blood pressure, but the blood nitrogen is above normal, and the patient shows evidence of increasing toxemia. Recently, while in the autopsy rooms of Professor Volhard's clinic and in Vienna, I was surprised at the relative rarity of death from chronic kidney disease unless there was a superimposed acute nephritis. If we can tide

the patient over the acute stage, complete recovery from the acute symptoms may take place. Bed rest and careful dietary measures are extremely helpful.

The patient with chronic glomerular nephritis usually lives for many years, and for a long time the only findings suggestive of a kidney lesion may be a slight albuminuria and failure of the kidney to concentrate urine of high specific gravity. The blood pressure gradually rises, but the height of the diastolic is out of proportion with that of the systolic. A common finding is 160/120. If the patient escapes vascular accidents, there is a gradual contraction of the kidney and nephro-sclerosis develops.

Nephro-sclerosis may be the result of chronic glomerular nephritis, essential hypertension or arterio-sclerosis without hypertension. With the development of nephro-sclerosis, there is a gradual increase in nitrogen retention, and the specific gravity of the urine becomes fixed at 1.010 or lower. Gastrointestinal disturbances occur. Dyspnea, first noticed at night, is a frequent troublesome complication. It is due, in most instances, to toxemia from retention of waste products, but may be due to failure of the left ventricle. Finally, the kidney is even unable to excrete water and the result is death from complete retention.

I should like to briefly discuss nitrogen retention. During the past year, some clinicians have condemned protein restriction in chronic nephritis, but have neglected to make any distinction between nephritis and nephrosis and have made no mention of nitrogen retention. The retention of nitrogen is only one of many retained products in kidney insufficiency, but it is one of the most reliable guides at our disposal. It is a close second in importance to water function tests. In congenital atrophy of the kidney, the blood nitrogen may be very high without much change in the clinical picture. In Professor Volhard's clinic, I saw a woman, 30 years of age, with congenital atrophy of both kidneys, who had had for at least two years a blood urea nitrogen always ranging from 150 to 200 mgs. There was no elevation of blood pressure, no gastric disturbance and the blood nitrogen was only slightly reduced by diet. Strange to say, the specific gravity of

the urine was not fixed. Her body had fairly well adjusted itself to the disorder of metabolism. Such a high blood nitrogen cannot be present for very long in a patient with chronic glomerular nephritis without the development of uremia. Marked reduction of protein intake in nephritis is not necessary until nitrogen retention occurs, and then moderate protein restriction may be a life-saving measure. It has been proven that a daily intake of 30 or 40 grams is compatible with life over a long period of time, providing there is sufficient fat and carbohydrate in the diet. A sudden increase of nitrogen retention may be due to a superimposed acute lesion, and as soon as this subsides we may be able to increase our protein to approximately 80 grams a day, which is a liberal allowance. Remember, we are speaking of nephritis and not nephrosis, and I emphatically state that an attempt to benefit the patient suffering with nitrogen retention with high protein diets, especially if the specific gravity of the urine is fixed, is sure to be disastrous. It is more rational to combat the anemia with blood transfusions and iron. If after a few weeks of low protein intake the blood nitrogen is not reduced, it may be assumed that such a diet is not beneficial, and then a diet with moderate protein intake is permissible, providing that such a procedure does not increase the nitrogen in the blood. Occasionally, we will see a patient in whom the blood nitrogen is fixed at 40 to 50% above normal, and here a regular diet with protein of 80 or 90 grams is not harmful.

A word of caution is necessary in regard to salt restriction in nitrogen retention. Salt is a powerful kidney stimulant. It also tends to keep a certain amount of fluid in the tissues of the body. When the specific gravity of the urine becomes fixed, the kidney has lost its function as a filter and is nothing but a sieve. At this stage, the only means that the body has of excreting the waste products of nitrogen metabolism is through the large amount of water going through the kidneys, which tends to take a certain amount of waste products with it. When we decrease the salt in such a case, we deprive the kidney of a powerful stimulus, and most disastrous of all, we take away the patient's desire for fluids, he becomes nauseated, the urine output de-

creases, the blood nitrogen rises and uremia is the result. For example, three years ago, a man, 62 years of age, with renal vascular pathology of long standing, was seen in uremia, following ten days of salt restriction. The blood urea nitrogen was 90 mgs. Salt was administered, the nitrogen gradually fell, and to-day, on a low protein diet with moderate salt, he is able to drive his own car and is comparatively comfortable.

The diseases of the kidney which I have just described are grouped under the head of renal vascular disorders. The degenerative changes, especially those involving the tubules, have been classified under the name of nephrosis. The term was first used by Von Müller to differentiate between the inflammatory and degenerative changes. Volhard and Farr were the first to apply this name to those degenerations of the kidney which involve the tubules. When it appears in typical form, it is characterized by great edema, normal blood nitrogen, normal or subnormal blood pressure, low serum albumin with relatively high globulin, an elevation of blood fat above 170 mgs., a basal metabolism frequently below normal and a urine of high specific gravity with heavy albumin, many casts and occasionally a few red blood cells. Pure nephrosis in the middle-aged adult without an associated nephritis is rare. Christian and Volhard have especially called attention to its rarity. In Volhard's medical service of six hundred beds, I saw only two cases of clinically pure nephrosis in patients past thirty years of age. It seemed more common in younger patients. As the tubular and vascular structures of the kidney are so closely related anatomically, it seems fair to assume that a diffuse degenerative process could not exist very long in the tubules without some disturbance in the glomeruli and vice versa. This probably accounts for the nephritic form of nephrosis and the nephrotic form of nephritis, and for the later development of renal insufficiency with hypertension and urea retention in the patient with chronic nephrosis.

The etiology of the disease is obscure. As the result of Epstein's work, we are led to believe that nephrosis may be, in some cases, of extra-renal origin. In a patient seen re-

cently, low blood protein, with relatively high globulin, preceded the albuminuria. The basal metabolic rate is below normal in many instances, but it is frequently difficult to obtain accurate readings on account of the patient's edema. However, there is some connection between low basal readings, high blood fat and the response to thyroid medication, and Lahey has pointed out that hypothyroid patients, who have an elevation of blood fat, respond more readily to thyroid than those with a normal blood fat. Tuberculosis, syphilis and the acute infections are, at least, exciting factors. In three adult patients with clinical nephrosis, seen in the wards of the Maine General Hospital, active pulmonary tuberculosis was present in two, and in the third the kidney disease followed a leg injury, although the X-ray showed no bone complication. In the two patients with associated pulmonary disease, there was also clinical evidence of vascular changes in the kidney. In four children with nephrosis, seen in private practice, there was no evidence of tuberculosis or syphilis and no history of any previous acute infection which could be directly responsible for the kidney disease.

The importance of differential diagnosis between nephritis and nephrosis has apparently not been taken seriously, as all four children seen by me had previously been treated with low protein diets without relief from their edema. Protein restriction is contraindicated in acute nephrosis. Here, the blood protein is actually below normal, and a high protein, low fat diet, with moderate salt restriction, reduces the albumin in the urine and decreases the edema. I do not consider marked salt restriction so important, as the edema is not due to salt retention. As soon as the acute edema subsides, a diet with moderate protein is probably much safer, due to the possibility of later vascular nephritis with nitrogen retention. Thyroid medication is indicated. Parathyroid extract is of questionable value. Salyrgan has been used, but should be given cautiously, as further tubular degeneration may be produced in sensitive patients by even small doses of mercurial. Salyrgan works much better if preceded by ammonium chloride. Theocin sodium acetate and theobromin sodium salicylate work well

in some cases. They should be given in full doses, but should not be continued for more than a week at a time. Good results have been obtained with a low sodium and high potassium diet.

Pyelonephritis is usually classified as a urological disease, but is seen first more frequently by the medical man. For fear of overstepping the bounds of internal medicine, my remarks will be limited. The disease may be hematogenous or urogenous and may be aggravated by focal infection. It is not infrequently associated with diabetes mellitus, and if so, treatment is ineffective until the diabetes is controlled. Tuberculosis, tumors and stones of the urogenital tract may be the cause of pyelonephritis. If these can be ruled out, one should next attempt to find the type of organism causing the pus. Every case, refractory to treatment, should have a thorough urological examination. Uncomplicated pyelonephritis may not reoccur after the initial attack. On the other hand, frequent attacks may terminate in chronic pyonephrosis, and we may have in addition a clinical picture of chronic nephritis combined with chronic nephrosis. I have a patient with such a complication, in whom there is an associated diabetes mellitus, and it is surprising how well she is doing. For several years, she

has been able to do all of her own housework, besides looking after her diet and insulin.

SUMMARY

As the conditions which I have attempted to discuss cover a large field, I have only been able to touch upon each rather superficially, but have made an attempt to bring out the following points: High blood pressure and kidney disease are chronic diseases, and, with the exception of the malignant forms, do not necessarily shorten life, and educating the public to this effect must certainly decrease the morbidity and mortality rates. Albumin in the urine, as the result of nephritis, does not in itself mean that protein restriction is indicated, and marked restriction of protein is harmful in the absence of nitrogen retention. More care should be taken in attempting to differentiate nephrosis from nephritis, especially in children and young adults. Salt-free diet is contraindicated in nitrogen retention. Heart disease is the most frequent cause of death in all types of vascular disease, with the exception of malignant types, and every attempt should be made to spare the heart. And finally, the urologist should be consulted in urinary infections if early response to treatment is not obtained.

Analysis of Cancer Work in Four Kennebec County Hospitals for a Two-Year Period

By DR. E. H. RISLEY, Waterville

It has been felt for some time by those most interested in the cancer problem in this state, that an effort should soon be made here in Maine to put on a "cured cancer" campaign similar to that so effectively done in Massachusetts last year by the state committee, and also by the American College of Surgeons at Chicago. At the latter symposium, 24,448 cases of cured cancer were reported from different clinics throughout the country. This was a noteworthy effort and showed plainly what could be done when cancer was properly attacked and handled by all the methods now available to the phy-

sician. As a result of the information gathered at this meeting, it was confidently predicted that the death rate could be lowered at least 33 per cent. if all cases could be diagnosed and treated when first symptoms appeared, and, even if only half the cases could be treated at once—without the usual costly period of delay—the mortality could be reduced by 25,000 cases.

I think it will be agreed by most of us that the nation-wide educational campaign carried out by the American Society for Control of Cancer among the laity in past years has already produced definite results,

in that patients are coming earlier and more frequently to their physicians for the diagnosis and treatment of suspicious lesions or symptoms.

The question may now well be asked, however, is the physician really interested in cancer? Is he satisfied with present results? Is he making any progress against this disease? Does not the general practitioner, in the vast majority of cases, when confronted with malignancy, look upon it as practically hopeless and really make very little effort to do *all* that could be done for the cancer patient? In other words, he has, through long habit, and perhaps bitter experience, assumed a permanently pessimistic rather than a sometimes hopeful attitude regarding the cancer problem. The avowed reason for the institution of these cured cancer symposia was to offset this pessimistic attitude as forcibly as possible by bringing out the hopeful side and demonstrating by the impressive figures that cancer can be cured if properly handled.

For these reasons there is a general consensus of opinion, among those most interested in the cancer problem, that, at present, the physician needs even more intensive education regarding malignancy than the laity. One of the objects of this symposium was to prove or disprove this theory.

This analysis was made to demonstrate what our own records show that we, here in Kennebec County, are doing—how adequately we are handling our cases, what we omit that we might do, and what progress we are making.

Are we diagnosing our cases early? Are we giving pre-cancerous conditions, especially those of the cervix, proper consideration? What are we doing for the inoperable case? Are we cancer-minded? In other words, are we treating *all* of our cancer cases efficiently?

The answer to these questions I think is set forth very vividly in the analysis presented from our four hospitals. Certain facts stand out rather prominently, even without a critical analysis of the reports as a group.

A glance at a few of the outstanding facts show:

1. That the proportion of cancer cases to the total number of cases treated in each hospital in a given period is extremely small—an average under 2 per cent. This is proba-

bly a much smaller number than we should be treating. This particular group analysis does not, of course, show the reasons for this small percentage, which are probably much more far-reaching than could be indicated in such a review.

2. The number of inoperable admissions—averaging around 40 per cent. (as high as 50 per cent. in one hospital)—is far too large, and certainly shows that we are getting our cases very late. Is this the fault of the patient or the physician? Probably both. The average period of delay for the four groups was nineteen months. This delay is not all the patient's fault. Too many physicians are inclined to temporize, especially on breast tumors. A policy of watchful waiting, so valuable in some diseases, should never be indulged in, in the presence of tumors of the breast. If one man cannot make a diagnosis at his first examination, fairness to the patient demands at least a consultation.

3. This series confirms the general opinion that superficial or visible cancer, such as lesions of the face, lip, extremities and breast, carries a higher percentage of operability and hence of curability. The fine record of one hospital in the successful radium treatment of such cases is ample demonstration of the value of such treatment.

In order that an honest cross section of the work of our four hospitals should be obtained, a critical analysis of these four reports has been made to point out especially the needs and defects in our methods of treating malignancy. This analysis shows up rather plainly the following facts:

1. Cancer records are in many cases poor, and far too meagre. The matter of a cancer family history is rarely recorded, and descriptions of the actual lesion, both before and at operation, are so meagre as to be practically worthless, in most cases, for adequate record purposes.

2. Too few biopsies for diagnosis are done.

3. Attempts at grading are practically nil.

4. The number of specimens sent to the pathologist is far too small and the pathological report of "Carcinoma" or "Malignancy"

is totally inadequate for scientific purposes. If we cannot get a report of "Adeno" or "Scirrhus" or "Colloid" or some accurately descriptive term as against the single word "Carcinoma" or "Malignant," we might as well revert to the old lay term of "tumor," as far as the scientific or prognostic value is concerned. A diagnosis of carcinoma or malignancy is of little value in the making of an accurate prognosis, which may be of greatest value to the patient in many instances. If surgeons are not interested enough in the details of pathology to demand from the pathologist an accurate description of the type of malignancy, and an estimate of the rapidity of growth, they have no right to complain of the meagerness of the pathological report. If we wish to treat our cancer patients intelligently, we must know the exact type of lesion in order not only to arrive at a prognosis, but also to be able to select the proper kind of post-operative treatment.

5. Some types of cells are of rapid growth and are radio-resistant. Here radium and X-ray are of little value and the prognosis is poor. In other types, cell growth is slow and may be radio-sensitive, hence can often be held entirely in abeyance by proper radiation, and the prognosis is correspondingly good. These bits of knowledge about the pathology of malignancy, if we do not already employ them, should be developed, if we are to treat our cases with all the keenness which the fight against this disease demands.

6. There is an almost total absence of follow-up service. This is undoubtedly due to lack of funds for social service. It is believed that the need could be met by the individual surgeon with very little cost or labor if systematically planned. It has been the observation of many individuals, and most clinics, that the average cancer patient is full of fear and is reluctant to report for check-up examination mainly through fear that something will be found for which there is no remedy. It is necessary, therefore, that the post-operative cancer case be actively followed up with systematic regularity. It is rarely safe to merely request that the patient report once in three or six months. He or she must be given a definite date on which to report, or, safer still, sent for at regular intervals. In

this way only can we hope to keep track of our cases, discover early recurrences and furnish adequate post-operative treatment. Once in three months for the first year, once in four months the second year, and once in six months for the third year, and yearly afterward, is none too often for such cases to be seen and gone over.

7. There is a noticeable lack of the use of pre-operative diagnostic X-rays of the chest in cases of breast tumors, and of post-operative therapeutic radiation also.

8. Practically nothing is being done for the inoperable or hopeless case. It is believed that here is a field which should be developed intensively, and that we have a real duty to these cases, which we have so far neglected.

This review covers too short a period to be of any value in reporting cured cases, which are only accepted after a five-year period has elapsed. It is suggested, however, that these records be placed on file in their respective hospitals as a basis for cured cancer effort at the end of three years more.

It had been hoped that out of this analysis some of the hopeful aspects of the cancer problem might stand out prominently, but a critical review of this group report fails to do more than to disclose things by which we fail in the most adequate treatment of our cases of malignancy. This certainly does not mean that we are not working hard, that many individual efforts are not praiseworthy, but it does seem to indicate rather clearly that as a group we need to concentrate more effectively on the following things, if we hope to improve our results and convince ourselves that the cancer problem is a hopeful one and that the cancer patient—even the inoperable one—is not a total loss from the start.

1. We must endeavor to overcome the often fatal period of delay on the part of the patient.

2. We should protect our patient and ourselves by asking for consultation in every case in which we personally are not able to make a positive diagnosis at our first examination, unless, of course, we intend to resort to biopsy.

3. We should be keen to treat early all

pre-cancerous lesions, especially those of the cervix, and we should preach frequent examinations for the discovery of such conditions to our patients.

4. We should advise more frequent exploratory laparotomies in doubtful or suspicious cases of gastro-intestinal disorders.

5. We should be more particular in our histories and records of cancer cases.

At operation we should aim at an accurate description of the gross pathology found, always obtaining a specimen for pathological examination if possible, even in the inoper-

able case. This can usually be rapidly and safely done with the radio knife or Bove loop.

We should do radical surgery.

We should accompany the specimen sent to the pathologist by brief but accurate clinical data.

We should initiate and employ continuously some systematic plan of follow-up for all cases.

We should more frequently use radio therapy post-operatively, and, lastly, we should give our best efforts for the relief of inoperable cases.

An Analysis of Forty-three Cases of Cancer Treated at the Augusta General Hospital During the Years 1932-33

By DR. V. T. LATHBURY, Augusta

During the past two years there have been treated for cancer in our hospital 2,368 patients. Forty-three were of varying types and degrees of malignancy.

Five cases of carcinoma of buccal mucosa, all treated with radium, all of which are alive and well to date.

Nine male patients had carcinoma of the lower lip. All were treated with radium and are, at present, clinically well.

During this period six cases of cancer of the breast have been operated, all but one of whom are now living. Three are living and diseased and of two there is no record.

One case of epithelioma of the left hand, starting from a wart, was radiated. The present status is not known.

Cancer of the liver was operated in the case of two patients, both of whom died in the hospital.

One patient was treated for each of the following types of cancer: Cancer of the colon, carcinoma attached to the duodenum, malignant sigmoid, cancer of the rectum and carcinoma at the ileo-caecal valve with almost complete obstruction.

In the first case the patient died three days after operation, the second died the day of the operation, the third died while in the hospital, the fourth lived eighteen months

after the operation, and the fifth was considered inoperable and returned to her home.

In this two-year period six cases of carcinoma of the cervix were treated. All had radium and the fourth stage patient X-ray treatments. Three of these cases are now clinically well, two have died, and one is well, but presents evidence of disease.

There were five cases with a clinical diagnosis of cancer of the uterus. Two died shortly after being admitted to the hospital. The other three are now clinically well.

One case of cancer of the vagina was treated with radium and is clinically well and free from disease at the present time.

One patient with a tumor between the uterus and the pubis the size of an orange was discharged as inoperable and her condition is at present unknown.

One woman was operated for a carcinoma of the broad ligament.

Carcinoma of the plantar surface of the foot was treated with radium needles in one instance. This patient is apparently free from disease at the present writing.

In summary, of the forty-three cases treated, twenty-two are now reported as clinically well and free from disease, 11 have died, five are well, but show signs of disease, and the present status of five is unknown.

The average time of first noted symptoms for thirty-eight patients was one year and six months; for the other five cases there is no record. Of particular interest is the fact that the average age of patients having carcinoma of the cervix was fifty-two years and eight months, the average dates of earliest symp-

toms being between two and three-tenths years.

The lesson to be drawn from this series of cases is the need of more careful education of the laity, earlier diagnosis by the physician and a more careful pathological study of tissues before or after operation.

Analysis of Cancer Cases at Gardiner General Hospital During the Years 1932-33

By DR. C. H. FERRELL, Gardiner

During the period ending October 1, 1933, there were in all thirty-eight cases of carcinoma admitted to the Gardiner General Hospital. Of these, seven were of the breast, nineteen of the gastro-intestinal tract, which classification includes those of the gall bladder and liver, four of the pelvic organs, two of the lungs, one of the axillary glands, one of the pancreas, and four of the bone.

Of the breast cases all were operated, five being complete removal, including the muscle and axillary gland, and two simple mastectomies or partial mastectomy not removing the axillary glands. Of these, four have died; of the remainder, one has had a recurrence in the uterus and pelvic organs, one has had metastasis to a rib on the opposite side and in the old scar, which have responded to deep X-ray therapy, and for eight months past, this woman has been apparently enjoying good health.

Of the gastro-intestinal and gall bladder cases, five were inoperable on admission, one refused operation, and the rest had the diagnosis confirmed at operation. The onset of symptoms varies from three years' duration to an acute onset, and the regions involved are gall bladder, four; stomach, three; liver, two; small intestine, one; cecum, three; colon, five; sigmoid, two. The stomach, gall bladder and cecum cases usually have died before leaving the hospital. The only one of this series alive after one year is a case of colostomy of the splenic flexure.

Of the pelvic cases, three were of the cervix. One had had symptoms for two years and had an amputation of the cervix; two were not operated on, but were admitted to

the hospital for radium treatment. No biopsy was done, but the clinical findings were carcinoma. Radium was advised as after-treatment in the one case which was operated, but all three have died. The other of the four cases were carcinoma involving the bladder and prostate, who had complained of symptoms for ten months, was found inoperable, and died without treatment except palliative.

Two lung cases, one involving both lungs with symptoms for eighteen months, and the other one lung only, symptoms dating back four months. These were diagnosed radiologically and both died.

One case of carcinoma of the axillary glands with no apparent metastasis died within a year.

In one case of carcinoma of the pancreas, exploratory operation was done and the patient succumbed.

SUMMARY

Out of the thirty-eight cancer cases admitted, twenty-nine have died. Results of surgical treatment seem to be more favorable in our series with breast cases than with any other type of lesion which we have encountered. Outlook for life would appear to be more encouraging the earlier surgical intervention is undertaken. Radium in those few cases in which it has been used has seemed of almost negligible value, whereas X-ray therapy seems to show a definite benefit.

RECOMMENDATIONS

Early diagnosis, the urging of X-ray studies in those obscure gastro-intestinal cases

which frequently will reveal a beginning malignancy, and early surgery, with the idea in view of removing all tissue which may be involved, careful follow-up observation of the patient, together with unstinting use of the

deep X-ray therapy at first sign of any recurrence. Acquaint the patient with the condition and get his coöperation, which will mean months, if not years, of added useful life.

Analysis of Cancer Cases at the Thayer Hospital During the Years 1932-33

By DR. A. H. McQUILLAN, Waterville

In reviewing the case records at the Thayer Hospital, Waterville, Maine, from March 1, 1931, to October 1, 1933, there were thirty-five cases of malignant disease admitted in 2,020 patients. Of this number, six cases have been excluded in this report, inasmuch as they were cases admitted for X-ray examination alone. This leaves twenty-nine cases, or an incidence of approximately 1½ per cent. of all cases admitted who had a diagnosis of cancer made. This report will be based on an analysis of these cases.

Taking the twenty-nine cases as 100 per cent., we find by far the greatest percentage confined to the gastro-intestinal tract. There were twelve cases or 42 per cent. which were further divided as follows: Carcinoma of the rectum, three cases, or 10½ per cent., carcinoma of the colon, three cases, or 10½ per cent., and these further divided into carcinoma of the sigmoid, one case, carcinoma of the colonic flexure, one case, and carcinoma of hepatic flexure, one case; carcinoma of the stomach, three cases, or 10½ per cent., and carcinoma of the esophagus, three cases, or 10½ per cent. The next largest number in this series was carcinoma of the breast, four cases, or 14 per cent., carcinoma of the antrum, lower lip and uterus respectively, were two cases each, or 7 per cent. The carcinoma of the uterus were further divided into carcinoma of cervix and fundus, one case each. The remainder of the cases, seven in number, were as follows: One case each, of malignant disease of the ovaries (bilateral), liver, nose, lungs, forearm, thigh and nasal septum, or incidence of 3⅓ per cent. each. Of this entire series, there were seven

cases of surface or visible cancer.

Further analysis of the records showed that twelve or 42 per cent. were inoperable at the time of admission. 50 per cent. of the inoperable cases were of the gastro-intestinal tract, three of the esophagus and three of the stomach. Two of the esophagus cases were esophagoscoped and biopsies made and one further treated with radium after a successful gastrostomy was performed. Of the three stomach cases, only one was considered sufficiently early to allow a posterior-gastro-enterostomy to be performed, one was not explored because of the presence of ascites, due to liver metastasis, later confirmed by autopsy, and the other was considered an inoperable case after exploratory laparotomy.

In tabulating the end results, we find the following:

There were three cases of sarcoma: one, a fibrosarcoma of the knee, which now has a recurrence six months after a resection. This case is now receiving X-ray treatment. The other two cases are dead, one, a round cell sarcoma of the lung, died while in the hospital, and the other, an endothelioma of the forearm, died from acute purpura hemorrhagica four months after amputation at the shoulder joint.

The three cases of carcinoma of the stomach are all dead. Two died in the hospital, and one died six months after gastro-enterostomy.

The three cases of carcinoma of the esophagus are all dead. One died one year after gastrostomy, another lived two months, and the third lived two months.

Of the three cases of carcinoma of the rectum, one died from metastasis ten months

after resection, one is alive and well two years and fourteen months after resection, and one is alive one and a half years after permanent colostomy.

Of the three cases of carcinoma of the colon, one died of metastasis two years after resection, one is alive and well two years and five months after resection, and the other is alive and well one year and two months after resection.

Of the four cases of carcinoma of the breast, three are living and well, four, ten and eleven months after radical amputation. One died four years after amputation from metastasis to the brain.

One of the two cases of carcinoma of the antrum is living and well and has no recurrence one year and four months after excision and radium. The other died six months after the same treatment from metastasis.

The two cases of carcinoma of the lip are alive one year and one and a half years after excision. Neither have shown recurrences.

There were two cases of carcinoma of the uterus. One is well two and a half years after panhysterectomy and the other case, carcinoma of the cervix, has not been heard from.

One case of carcinoma of the nasal septum is alive and well two years after excision and has no recurrence.

One case of carcinoma of the ovaries bilateral died two months after laparotomy from metastasis.

One case of carcinoma of nose has not been heard from.

The case of carcinoma of liver is alive, but in very poor health six months after laparotomy.

In reviewing these twenty-nine cases, we find 34 per cent. alive and well and without

recurrence as far as is known, but most of these cases were seen during the past year, and in some, certainly not sufficient time has as yet passed to be able to determine the efficiency of the treatment carried out. 48 per cent. of the cases in the series are dead. This means that approximately one-half of the cases of cancer were unable to be cured or life prolonged to any great degree, at least by the time they were seen and treatment instituted. Only one case has no follow-up data.

An analysis of the case records studied for this report shows that:

1. Twelve cases did not have satisfactory pathological reports. This error should be corrected.

2. Too many cases were inoperable at the time of admission—42 per cent.

3. Too few of the inoperable cases received palliative treatment—surgery, X-ray, radium, etc.

4. The description of the gross lesion was entirely too superficial in some of the records studied. This can be remedied. The probable explanation of this is that the histories were not written at the time the case was fresh in the mind of the physician in attendance.

5. There were too few of the operable cases radiated either before or after operation.

6. That the cases of sarcoma are not as favorable for any kind of treatment as those of carcinoma.

7. That the cases of surface or visible cancer are more amenable to treatment and are properly treated earlier than invisible cancer cases.

Analysis of Cancer Cases at Sisters' Hospital During Years 1932-33

By DR. L. A. GUTE, Waterville

In the two-year period beginning July 1, 1931, and ending July 1, 1933, the total cancer cases admitted to the Sisters' Hospital were thirty-eight, divided in order of frequency as follows:

Cervix,	6	Inoperable,	5
Stomach,	4	Inoperable,	4
Breast,	5	Inoperable,	0
Intestinal,	5	Inoperable,	3
Ovary,	4	Inoperable,	1
Rectum,	4	Inoperable,	2
Uterine,	3	Inoperable,	2
Pyloric,	3	Inoperable,	0
Axillary,	1	Inoperable,	0
Bladder,	1	Inoperable,	1
Metastatic,	1	Inoperable,	1
Penis,	1	Inoperable,	0
Total,	38	Total,	19

Pathology:

Adenocarcinoma,	9
Squamous cell,	3
Colloid,	2
Epidermoid,	1
Sarcoma,	1
Total,	16

Unknown pathology, 22 (57 per cent.).

50 per cent. of cases admitted were inoperable. Two of the cases admitted with intestinal carcinoma had no symptoms until intestinal obstruction occurred. It will be seen that the cases with invisible pathology, such as the cervical and stomach cases, have a high percentage of inoperability, whereas cases with visible pathology are highly operable.

Treatment of inoperable cases:

No treatment,	13 cases
	(68 per cent.)
Radium,	2 cases
Palliative operation,	2 cases
Exploratory laparotomy,	2 cases
Cecostomy and colostomy,	

The time elapsed between the discovery of the lesion, first visit to the doctor and institution of proper treatment varied from two weeks in the earliest case to three years in the longest, the average being nine months.

The results following operation or treatment can be classified only with great difficulty due to the absence of follow-up service. Out of five breast cases operated on, four had a radical mastectomy, one died three years after operation, one case was reported as improved after operation, two cases recovered. One breast case had an amputation only. One case of pyloric carcinoma had posterior gastro-enterostomy and died later on at home. As stated, none of the cervical cases had any treatment with the exception of a biopsy specimen in one case. Two cases which had radium treatment were both uterine carcinomas and are both reported as improved. One rectal case had a combined abdomino-perineal operation with improvement, the other case had a first stage abdomino-perineal operation and died at home.

As has been pointed out so often before, we of the medical profession have some of the blame to carry for these hopeless cases. Just as long as it remains human to dilly-dally and keep putting off visits to the doctor, either intentionally or through ignorance, and just as long as we have nooks and corners hidden in our anatomies to give cancer a good start before letting us know, we shall continue to have a fixed irreducible per cent. of inoperable cases which we will fail to eradicate. Our solution lies in regular physical examination and education of the public.

Conclusions:

1. More should be done for the inoperable cases;
2. Radium should be tried more frequently;



3. Some effort should be made to establish a follow-up service without which proper evaluation of treatment is impossible;

4. Regular physical examinations as so often recommended should be urged on our patients; and lastly,

5. It is encouraging to see the results of treatment in the cases with early visible pathology.

Abstracts

"The Mastoid Cells; Their Arrangement in Relation to the Sigmoid Portion of the Transverse Sinus" Meltzer

Arch. Oto-laryn., March, 1934.

In this anatomical study of the mastoid cells the author classifies them into a superior group, including the antero-superior and postero-superior; an antero-inferior group, including cells of the posterior canal wall and tip, and retrofacial cells; and the mesioposterior group, making up the greater mass of cells. He feels that the position of the lateral sinus in relation to the cortex, digastric crest, posterior canal wall, etc., determines the extent and arrangement of pneumatization. Exposure of the sinus plate shows the pattern and enables one to know where to look for cells. With the sinus laying deep cells will be found posterior to it, while when close to the cortex none will be found in this position. Cells will develop where there is space between the sinus and the cortex, digastric crest and posterior canal wall.

F. T. H.

"Contact Allergic Coryza" Forman

Arch. Oto-laryn., March, 1934.

Allergic coryza may be atopic, bacterial, physical or contact. This latter is similar to contact dermatitis. Its recognition depends upon elimination of atopy and bacterial allergy by proper study, history of proper exposure, and identification of the offending substance by test application to the nasal mucosa.

F. T. H.

"A Syndrome of Ear and Sinus Symptoms Dependent upon Disturbed Function of the Temperomandibular Joint" Costen

Annals Otol., Rhinol. and Laryn., March, 1934.

Headache and ear symptoms directly dependent upon disturbed function in the mandibular joint occur frequently in endentulous patients and are often overlooked. The diagnosis is established by lack of molar teeth, or badly fitting dental plates, permitting overbite; mild catarrhal deafness, improved by inflation; dizzy spells, relieved by inflation; tenderness of mandibular joints; comfort to patient from interposing a flat object between the jaws. Symptoms arise as a result of overaction of the joint, due to overbite and retrusion of the condyles with pressure backward on the Eustachian tube, later absorption of the meniscus, condyles and surrounding bone.

F. T. H.

"Nerve Fibers of Spinal and Vagus Origin Associated with the Cephalic Sympathetic Nerves" Kuntz

Annals Otol., Rhinol. and Laryn., March, 1934.

Very exhaustive and carefully done experimental work leads to the conclusion that components of the vagus and upper thoracic spinal nerves extend cephalad in the internal and external carotid plexuses. These are mainly, if not exclusively, afferent in function. They may play a role in certain cases of atypical facial neuralgia. The existence of afferent components of the upper thoracic spinal nerves in the carotid plexuses affords an anatomic basis for the explanation of localization in the upper extremity and thoracic segments of referred pain from lesions in the orbit, mastoid, nose and sinuses.

F. T. H.

"Cerebral (Ventricular) Hydrodynamic Test for Thrombosis of the Lateral Sinus" Dandy

Arch. Oto-laryn., March, 1934.

In certain cases the differential diagnosis may rest between brain abscess, meningitis, thrombosis of the lateral sinus and encephalitis. Because of the papilledema ventricular puncture may be indi-

cated. By compression of the jugulars the patency of the lateral sinuses may be tested in this way, just as is done by spinal puncture in the Tobey-Ayer test. It makes additional spinal puncture unnecessary.

F. T. H.

"Sensory Disturbances Following Radical Operations on the Antrums, with an Evaluation of the Vertical Incision"

Shapire et als.

Arch. Oto-laryn., March, 1934.

There has been considerable discussion regarding the after-effects of operations in the canine fossa disturbing the nutrition and sensation of the upper teeth. Vertical incision, instead of the usual horizontal one, has been proposed in order to avoid this. The authors operated upon seventeen cases bilaterally, using the vertical incision on one side and the horizontal on the other. No appreciable difference in favor of the vertical incision was found. In fact, there was somewhat more sensory disturbance on the sides where this was used. A careful anatomical study of the nerve supply in this region is presented, which shows that the incision plays relatively little part. Damage to the anterior superior alveolar nerve is practically unavoidable in opening through the bony wall of the antrum, as the nerve leaves the infraorbital and runs in a tunnel in the anterior wall of the antrum to the incisor and canine teeth. There is less likelihood of injury to the middle branch which supplies the premolars. Numerous twigs from these nerves form a plexus which gives origin to the terminal filaments to the teeth. This may account for the recovery from sensory disturbances which usually takes place within a short time.

F. T. H.

"Tobacco, Alcohol and Angina Pectoris"

By PAUL D. WHITE, M. D., and TRIMBLE SHARBER, M. D., Boston, Mass.

The American Medical Journal, March 3, 1934.

In their analysis of 1500 cases, 750 of which had angina and 750 cases had not had angina, careful investigation was made regarding their past habits in regard to the use of alcohol and tobacco.

It appears from their study that neither the use nor the abstinence from tobacco or alcohol plays an important role in the genesis of angina pectoris. In occasional cases the use of tobacco apparently aggravates or precipitates attacks of angina pectoris, and in occasional cases alcohol helps to prevent or to relieve such attacks.

L. H. S.

"An Antidote for Acute Mercury Poisoning"

By SANFORD M. ROSENTHAL, M. D., Washington, D. C.

Rosenthal found by experimental work on dogs that sodium formaldehyde sulfoxylate saved nine out of twelve from a fatal dose of corrosive mercuric chloride when administered not later than an hour and a half after the poison had been given. In these nine surviving dogs there was no evidence of renal damage, as evidenced by no elevation of non-protein nitrogen in the blood. No renal damage was demonstrated in dogs which succumbed.

The sulfoxylate was used in ten human cases of acute poisoning from mercuric chloride and recovery occurred without appreciable kidney damage.

L. H. S.

**Extra Issue of the Maine Medical Journal*

One hundred years ago, on the seventeenth of this very month of May, the well-known Dr. Reuben Dimond Mussey, Professor of Anatomy and Surgery at Bowdoin, spoke to the members of our very own society in the stone church on Congress Street in Portland. The audience was large and appreciative, and the topics, as I heard, ranged from vege-

tarianism, which the speaker loved, to tobacco, which he detested.

Now this centennial gives me a most fitting opportunity to express to the members of this very same society my deep regret that I cannot appear in person before you and say a few words on the important topic of our State MEDICAL JOURNAL, chiefly.

* Read at the First General Afternoon Session at the 82nd Annual Meeting, May 28, 1934.

Those of you who have treated patients with a fracture of the femur, and later on the same patient afflicted with arthritic rheumatism, will know the patience needed to pull your patient through the ordeal. Some die from such a fracture, others need many an operation from a splintered bone, and all of the survivors need crutches for many a month. I have never discovered any adequate description of the difficulty of walking on crutches, and that is my chief reason for not standing here, in person, and expressing my gladness to meet with the members of the Maine Medical Association of today. All that I can say is, that crutches are things to make you shudder, either on a sidewalk, apparently level, or on a flight of stairs. So I stay at home with regret, and wait patiently for a recovery, sooner or later, thankful at all events, for a little more life.

Now, then, during the past year we have labored diligently on the JOURNAL, and congratulated ourselves that the current number, with its forty-eight pages, its editorials, book reviews, essays, case reports, and biographies of departed members, was worthy of the society. For all that we want to improve the JOURNAL in every way. Although the Board of Editors has proved its value, we want additional help from every member, in one way or another.

Hardly one member in twenty ever thinks of handing in a case report, a few words about some epidemic, a note on some curious accident, and some figures about motor car accidents. Too many members, when asked, regret that they were never taught how to

write a paper, and do not know how to put their thoughts or knowledge into print. To every member we say, hand in to the Editorial Board whatever occurs relating to medical Maine, and we will put it into shape, when requested. Items of slight value, as they appear now, may gain in historical value to our successors.

Some members find fault with the JOURNAL, but to those we say, hand in something of your own, to improve the JOURNAL, wherever possible. Do your share, and cease to find fault.

Think of Hippocrates seeing a fever in the Balearic Island and Minorca, before the time of Christ, and of Dr. Cleghorn seeing the same fever two thousand years later, and then of our having the same fever in Maine, as I am talking to you.

Let me, in conclusion, be sure to speak a few kind words from the Board of Editors for the wonderful help which we have enjoyed in the past year from our very able and trustworthy Secretary-Treasurer, Miss Rebekah Gardner. Last of all, and speaking personally, I promise to serve you all to the best of my ability so long as you choose to ask me. I end what I had to say by wishing you all good luck with your patients, and once more I regret that I cannot appear here and talk to you, face to face.

Editor of the MAINE MEDICAL JOURNAL since the lamented death of my predecessor, Dr. Philip Webb Davis.

JAMES ALFRED SPALDING, M. D.,

Portland, Maine.

*The President's Page

TO THE MEMBERS OF THE MAINE MEDICAL ASSOCIATION :

Every doctor ought to read and re-read Osler's essay entitled, "On the Educational Value of the Medical Society." I wish that I might read it to you to-day. However, since time does not permit, I shall quote liberally from it, in order that you may grasp more fully the possibilities for real service that you control as secretaries of your respective societies. You represent the units of organization, which together constitute the State Association. Just in proportion as these individually function well, to that degree shall we have a parent body, membership in which shall be cause for real pride.

Said Dr. Osler, "The Society acts as a professional cement between the older and the younger men.

"It fosters that old-fashioned courtesy which makes a man shrink from wounding the feelings of a fellow practitioner.

"It is the confounded tales of patients that so often set us by the ears, but if a man makes it a rule never under any circumstances to believe a story told by a patient to the detriment of a fellow-practitioner, he will have the satisfaction of knowing that he has closed the ears of his soul to ninety-nine lies, and to have missed the hundredth truth will not hurt him.

"Most of the quarrels of doctors are about non-essential, miserable trifles and annoyances—the pin pricks of practice—but the good fellowship and friendly intercourse of the medical society should reduce these to a minimum.

"The medical society enables a man to obtain his intellectual rating; to learn his professional assets and liabilities.

"Doctors don't 'take stock' often enough. We carry on our shelves stale, out-of-date goods.

"The society helps to keep a man up to the times; to refurnish his shop with the latest wares. It keeps his mind open and receptive, and counteracts the tendency to premature senility, which is apt to overtake one who lives in a routine.

"A clinical evening devoted to the rarer affections is of very great help in diffusing valuable knowledge.

"These teach the difficult art of observation and, what for some is equally difficult, the art of recording an observation in brief and plain language.

"Isolation from the general body of the profession is suicidal in the long run, for it terminates in intellectual stagnation.

"Some doctors, successful from a money standpoint, practice with a clinical slovenliness that makes it difficult for kind Dame Nature to cover their mistakes.

"The medical society gives encouragement for the day's work and a betterment of mind and methods.

"Finally, it lays the foundation for unanimity and friendship so essential to the dignity and usefulness of the profession."

The foregoing quotation will give you some idea of what the county society *may* accomplish and of how extremely important *your jobs are*.

In addition to the *clerical work* of the office—the prompt collection of dues; reporting, again promptly, all society news to the Association Secretary;



making use of the list of available speakers for your meetings, the names and subjects to be provided either by the Secretary or the chairman of the Scientific Committee; *notifying the Secretary, without fail, of all pending meetings*—in addition to the foregoing, I say, you now have an educational duty to perform which is, indeed, your real function. To lay “the foundation for unanimity and friendship so essential to the dignity and usefulness of the profession,” is a noble and praiseworthy ambition. To what degree the goal is reached, depends upon the vision, the ability, the resourcefulness of you men, and upon your willingness to put your shoulders to the wheel.

We are living in trying, changing times. There is a disposition in some quarters to focus attention upon the thousands who *need* medical and dental care, and are not getting it, with the implication that somehow the medical profession is responsible for the dilemma. The term “high cost of medical care” connotes to the average layman big fees for the doctors. However, the Rosenwald Fund graphically points out that of three and one-half billions spent annually* for sickness, physicians in private practice *receive* only 29.8 per cent. The fact is, as stated by Pottenger, “the general economic system is still in the stage of plagues and miasmas,” and we doctors are inextricably intertwined with it.

We hear a good deal about the “New Deal.” “What is it,” writes a friend. “Is it a new yardstick by which to measure the extent to which the government—federal and state—may regulate private industry? Is it a new definition of the due process of law? Is it state socialism? Is it a method by which the federal government seeks to usurp the powers of the forty-eight sovereign states? Is it a form of fascism?” He is asking himself and us these questions. He does not know the answer; neither do we. It is a time, however, of new interpretation of the law in the light of confronting conditions; a time of experimentation with untried methods.

It is your duty to inform yourselves and the societies which you represent concerning the merits and demerits of State Medicine, Sickness and Accident Insurance, Unemployment Insurance, Old Age Pensions and Group Care, which are a few of the many plans that have been suggested to insure adequate medical service to those who cannot pay for it readily out of their earnings.

The large Foundations—Julius Rosenwald, the Milbank, The Century—are using their influence and resources to impress the medical profession with the desirability of embarking upon some sort of collective scheme, with a view primarily, as I see it, to benefit the patient. They are taking advantage of the depleted state of many doctors’ pocketbooks to inveigle them into sponsoring some sort of arrangement whereby they may slave for a pittance. If you approve of their plan you are, according to them, a “progressive doctor,” whereas, if you demur, you are a “recalcitrant.” They may be right; time will tell.

In the meantime, while, like men, codes may come and codes may go, the code of medical conduct enunciated by Hippocrates will never change. Says Squier, “No other profession, science or industry has ever been organized upon a code of conduct. However, now, in the effort to revive our failing economic system, codifying every branch of human endeavor has become a national pursuit, but the medical code need not be altered, for it was not reared on competitive gain. The moral debacles which have occurred in industry, public utilities, banking and so on, have not taken place in medical practice, and will never take place so long as physicians follow the precepts

of the Hippocratic Code." Preach that to your societies. The profession has always numbered among its membership a large proportion of the "altruistic asses" of the community. Never has it refused to alleviate suffering because a man could not pay. Each year it devotes half of its time to charity, and the big Foundations stand by and look on. Of course, there is no justice in an economic set-up that allows this burden to be borne by one class, even if, thus far, out of the kindness of their hearts, doctors have submitted to the imposition. Philanthropy, contrary to general belief, pays but 5 *per cent.* of the national medical bill. Let the Foundations *endow* the hospitals without dictating their policy, so that no bed *need* be vacant; so that staff doctors may not be obliged to devote half their working hours to charity. Again, let the state, through a system of taxation, raise enough money with which to pay physicians a decent living wage for the care of its indigent sick. *Medical Economics* for March, 1934, expresses my sentiment with regard to medical charity perfectly in these words: "The responsibility for medical charity rests properly with the philanthropic agencies and with our municipal, state and federal governments—not with the doctor." If, like Dr. Jelliffe, one enjoys being an "incorrigible optimist," otherwise known as a "sap," there is abundant opportunity in medicine to gratify that taste. But long before sixty, dear Doctor, is it "time to realize that all give and no take butters no parsnips."

Ours is a calling, not a business. It matters not to us in what honorable and just way money is secured to finance the sickness of those whose incomes do not enable them to meet the emergency. What *does matter* to us is that we be paid a reasonable compensation for our knowledge and time and effort. We have no desire, and, I think, no intention of being regimented into anything for any reason that savors of Lodge Practice. "The laborer is worthy of his hire." The dignity and usefulness of the profession will suffer irreparably if any scheme prevails whereby doctors are hired by politicians for a stipulated sum to minister unto the whims and caprices of a circumscribed group. Initiative and progress will be killed, and the last state of the people worse than the first.

We doctors deplore the hardships occasioned by technological unemployment. We regret sincerely that the combined annual earnings of 50 per cent. of all families is less than two thousand dollars; we, too, are victims of a world-wide depression, but as a profession we are not to blame for the situation, and, moreover, as a group we have done and still are doing as much to mitigate its evils as any other group.

From the beginning the profession has stood resolutely between the people and panaceas, cure-alls, health-schemes in general. In every move that we have championed in the past for the people, we have met with bitter opposition from the people. Still, we are for them.

There never was a time when intelligent, thorough-going medical organization was needed more than at present. This must begin in the County Society. Therefore enroll every eligible, respectable doctor. Point out to him the educational and political advantages of *active membership*. Adapt your meetings to the season and arrange attractive, instructive programs, engaging, so far as possible, men from your own State Association as speakers.

Finally, select your delegates and councilors with care, having in mind always and solely their interest in and fitness for the duties they are to perform; and then support them.

In union there is strength. "If we don't hang together, we will hang separately."

E. W. GEHRING.

(Address to County Secretaries, Bangor, Maine, May 29, 1934.)



Notice

Philadelphia Academy of Surgery The Samuel D. Gross Prize Fifteen Hundred Dollars

Essays will be received in competition for the prize until January 1, 1935.

The conditions annexed by the testator are that the prize "shall be awarded every five years to the writer of the best original essay, not exceeding one hundred and fifty printed pages, octavo, in length, illustrative of some subject in Surgical Pathology or Surgical Practice founded upon original investigations, the candidates for the prize to be American citizens."

It is expressly stipulated that the competitor who receives the prize shall publish his essay in book form, and that he shall deposit one copy of the work in the Samuel D. Gross Library of the Philadelphia Academy of Surgery, and that on the title page it shall be stated that to the essay was awarded the Samuel D. Gross Prize of the Philadelphia Academy of Surgery.

The essays, which must be written by a single author in the English language, should be sent to the "Trustees of the Samuel D. Gross Prize of the Philadelphia Academy of Surgery, care of the College of Physicians, 19 S. 22d St., Philadelphia," on or before January 1, 1935.

Each essay must be typewritten, distinguished by a motto, and accompanied by a sealed envelope bearing the same motto, containing the name and address of the writer. No envelope will be opened except that which accompanies the successful essay.

The committee will return the unsuccessful essays if reclaimed by their respective writers, or their agents, within one year.

The committee reserves the right to make no award if the essays submitted are not considered worthy of the prize.

WILLIAM J. TAYLOR, M. D.,

EDWARD B. HODGE, M. D.,

JOHN H. GIBBON, M. D.,

Trustees.

Philadelphia, April 15, 1934.

Books Received and Reviewed

Nervous Breakdown, Its Cause and Cure. By W. Beran Wolf, M. D. Published by Farrar & Reinhart, New York. Price, \$2.50.

This book is well printed in a couple of hundred pages and contains seven chapters on nervous breakdowns, and is dedicated to "Men and women in perplexity."

After a preface of a few pages, the writer proceeds to tell us, in chapter one, what a nervous breakdown is and how it originates; how it works and how it is cured—by looking forward. In chapter two, he has devoted his efforts to the various symptoms, and mentions, amongst others, suicide and suicidal impulse. In chapter three, we have the case of a boy who, during a critical time at college, through fear of being turned out, attempted suicide, but failed and was rescued, this being the cause of a nervous breakdown; and in the same chapter, we have the case of a young woman victim, a victim not only of her mother's social aspirations, but of a childhood of coddling and pampering, married a professor, which marriage resulted in a terrible upheaval of her romantic ideals.

Chapter four refers to the sexual breakdowns, from sexual ignorance, amongst men and women on the marriage question and others, to which a good many of our readers will turn at the first impulse. Chapter five is about a boy who has an inferiority complex, who inherits a large fortune and then loses it; and then, in this same chapter, there is the case of a family breakdown. Chapter six is devoted, in fifty pages, to the plain words to be said to patients and gives a dialogue to be learned by heart, containing the first steps to mental health, and in the last chapter, we find the art of getting along with ourselves—how to use our leisure, how to cultivate a sense of humor, the great art of avoiding argumentative conversations and the art of living in the present.

This, in a word, is a very clever book which should have a place in every physician's library, for he will come across just such cases at almost any time, to say nothing of the possibility of becoming a victim himself, to some extent, through some failure or unexplainable breakdown which will require self-determination to conquer.

J. A. S.

County News and Notes

Cumberland Portland Medical Club

The regular monthly meeting of the Portland Medical Club was held at the Columbia Hotel on Tuesday evening, May 1st, at 8.00 P. M.

Resolutions on the deaths of Dr. C. A. Baker and of Dr. L. B. Marshall were presented to the Club and spread upon the records.

The paper of the evening was by Dr. Alvin A. Morrison, who chose for his subject, "Diverticulosis and Diverticulitis." There was an X-ray discussion by Dr. Langdon Thaxter.

ALICE WHITTIER, M. D.,
Secretary.

Kennebec

The meeting of the Kennebec County Medical Association was held at the Veterans' Administration Hospital in Togus, Thursday, May 17, 1934, afternoon and evening.

A Clinical Session was held at 4.30 P. M., which was presided over by Dr. George W. Alexander, President.

6.00 P. M. Dinner.

7.00 P. M. Tour of hospital.

8.00 P. M. Business Meeting.

Minutes of the last meeting were read and approved.

Dr. W. E. Kershner, of Bath, President of the Maine Medical Association, spoke of a communication which he recently received from the Julius Rosenberg Foundation, relative to the introduction of the English system of medicine in America, especially the Panel system.

The following papers were read:

"Intestinal Stasis et Sequelæ," by Dr. Louis F. Fallon, of Augusta, which was discussed by Dr. E. H. Risley, of Waterville.

"Hyperthyroidism," by Dr. Harrison L. Robinson, of Bangor.

Both papers were very ably presented and brought out many interesting points.

There were twenty-nine members present.

Respectfully submitted,

FREDERICK R. CARTER, M. D.,
Secretary.

Washington

The regular May meeting of the Washington County Medical Society was held in Eastport, on May 22, 1934.

The program consisted of a very interesting lecture entitled "State Health Work," by Dr. G. H. Coombs, of Augusta.

Dr. B. B. Foster, of Portland, delivered a very instructive paper on "Dermatology in General Practice."

Dr. Arch Morrill, of Augusta, gave important facts concerning the routine tests at the State Laboratory.

A short business meeting followed the addresses. Present, fourteen members and six visitors.

P. J. MUNDIE,
Secretary-Treasurer.

American College of Surgeons

The 1934 Annual Clinical Congress of the American College of Surgeons will be held in Boston, October 15 to 19.

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GETTING up an hour earlier in the morning is an inconvenience for most persons, but for the mother of young babies it is a hardship, sometimes almost tragic, frequently nullifying the best-planned pediatric advice.

This is especially true in the case of the nursing mother whose supply and quality of breast milk are affected by emotional shocks resulting often in agalactia and sometimes giving rise in the baby to diarrhea, colic, and even convulsions. Furthermore, the mother's emotional stress brings about a train of behavior on her part which is reflected in the child's psychologic reactions so that a vicious circle of bad habit formation is set up.

From this angle, the recent introduction of the pre-cooked form of Mead's Cereal, known as Pablum, assumes new importance in the doctor's

psychological handling of both mother and child, quite aside from its nutritional value.*

Because Pablum can be prepared in a minute, the mother can sleep the extra hour she would otherwise be compelled to spend in a hot kitchen cooking cereal. Added rest means better poise, so that petty annoyances do not bring jaded nerves. Prompt feedings prevent many childhood tantrums, and a satisfied baby usually eats better and enjoys better digestion and growth.

*Like Mead's Cereal, Pablum represents a great advance among cereals in that it is richer in a wider variety of minerals (chiefly calcium, phosphorus, iron, and copper), contains vitamins A, B, E, and G, is base-forming and is non-irritating. Added to these special features, it is adequate in protein, fat, carbohydrates, and calories. Pablum consists of wheatmeal, oatmeal, cornmeal, wheat embryo, yeast, alfalfa leaf, and beef bone.

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MAINE MEDICAL ASSOCIATION

Clinical Session will be held in Portland, October, 1934

(HOLT AND McINTOSH: HOLT'S DISEASES OF INFANCY AND CHILDHOOD, 1933)

One of the outstanding features of DEXTRI-MALTOSE is that it is almost unanimously preferred as the carbohydrate in the management of infantile diarrhea.

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1934-1935

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The New York State Department of Health reports a raw milk epidemic of septic sore throat that occurred in the middle of April in Potsdam, New York.

There were at least seventy-six cases with four deaths. Of these seventy-six patients all but three that have been investigated to date were among persons known to have used raw milk as a beverage from one producer-distributor. Two of the remaining ate in restaurants where that producer-distributor's milk was sold. He sold about 200 quarts of raw milk daily.

This epidemic is of particular interest because it illustrates so well the way an infection will spread from even remote sources. Apparently all of the milkers on

the farm were perfectly healthy.

The first case of the epidemic occurred on April 12. The wife of one of the milkers, who is employed in another town, had an attack of sore throat beginning March 12. Just after she recovered, she visited the farm where her husband was working, from April 1 to April 8. She had nothing to do with the milking and did not enter the dairy farm during her visit.

The second milker discontinued work on April 2nd and on April 9th became ill with septic sore throat. He returned to work on April 16th on which day the first milker developed septic sore throat. Four days after the first case was developed among the customers, an examination of the herd showed that four of the

cows were affected with hemolytic streptococci.

The history of this epidemic is cited here to show how easy it is for non-suspecting distributors of raw milk to peddle milk that is a very great danger to public health.*

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* FROM BULLETIN 110, JULY 3, 1934, I. A. M. D.



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Members whose 1934 dues remain unpaid will not receive the Journal after this issue. Their names have been removed from the roster of the Association and have been reported to the A. M. A. as NOT in good standing.

X



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Maine Medical Journal

The Official Organ of

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Editorials

Our Generation and State Medicine

Imnumerable wells of ink have, in recent months, been consumed in expressing the merits and demerits of our present system of medicine and its suggested or anticipated supplanter "state medicine." It is not the purpose here to analyze the two systems nor to form an estimate of their relative values. The writer is far too conscious of his prophetic limitations to estimate their values, as to whether humanity will be favorably or unfavorably affected in the generations to come. The point at issue is the implied contract that medical men and the public have mutually and solemnly agreed upon, and the injustice of its forcible abrogation by groups of lay people who rightly or wrongly are of the conviction that private medicine as we know it today shall be supplanted by state medicine.

Our generation of medical men in practice, whether conducted in a large metropolis, country wayside, singly or in groups, engaged in or out of institutions—whether practicing surgery or medicine, or engaged in research—has all made huge investments, often amid sacrifices calling forth the deprivation of bare necessities and simple comforts of life.

Medical men as a group do not regret their expended moneys and energies, despite the poor return in worldly goods as judged by the accepted standards of investment and return. His uneasiness and concern is centered about the threatened nullification of his cherished hopes and plans to practice his art in accordance with democratic ideals, by virtue of which he labored to attain his goal and to which he has every right of honorable heritage. To be pressed into involuntary avenues of service by any agency is rightfully repugnant to him, and against which it is his privilege and duty to militate. Any such contemplated change must be left to his own choice and expression through the agencies of his local, county, state and national societies. Such radical changes must take due cognizance of the private property investment, and embrace a plan for their just liquidation only when, and if, all other adjustments are made satisfactory to him.

J. G.

Progress in the Teaching of Cardiology

Those of us who attended the Maine Medical Meeting this year at Bangor had an opportunity to study a series of Mechanical Hearts

invented by Dr. George Levene of the Massachusetts Memorial Hospitals. We all marvelled at the ingenuity and skill in their preparation, intensely enjoyed the spectacle and learned many facts about the structure and function of the heart in a few moments, that otherwise would require many hours. The hearts were prepared to simulate the normal structure and function, the various arrhythmias and their corresponding structures, the thyroid, heart, etc., as viewed fluoroscopically. Indeed, one could feel that an intensive and

instructive course in cardiology could be obtained from their study in a brief time. The Westinghouse Electric Co. has recognized the teaching value of these hearts and is preparing to manufacture them for teaching purposes in medical schools and post-graduate teaching courses in cardiology. The Maine Medical Association is proud to have had the opportunity to have them presented at its Scientific Exhibit and congratulates Dr. Levene.

J. G.

A Cataract Extraction by Dr. Dimond Mussey in 1828

A recent newspaper report on a cataract operation for the King of Siam, and an excellent paper by Dr. Fisher of Chicago on *Intracapsular Extraction of Cataract* are suggesting to us to report to our readers an adventure in the career of Dr. Dimond Mussey, Professor of surgery at the Bowdoin and Dartmouth Medical Schools of a century and more ago. All the more interest attaches itself to our episode, because it is intertwined with an unique adventure, rarely, if ever, chronicled in the life of Daniel Webster, then at the height of his glory.

And now we proceed to say that in May, 1828, Dr. Mussey called at the house of the former U. S. Senator Parrott in Greenland, N. H., and looking into the eyes of his son John, a boy of twenty, and blind from birth with congenital cataracts, he said, that although he could operate then and there he was sure that he could do better for the boy if he were taken to Hanover where he could operate and follow the course of events daily.

This plan being accepted, the boy and his handsome sister on the twenty-seventh day of May, 1828, mounted the stagecoach from Portsmouth for Exeter and found as passengers, an officer from Fort Constitution and a physician, Dr. Magoon, from Exeter. They all talked together on politics and the Fort. Horses were changed at Exeter and Concord and Hanover was reached late in the afternoon.

Sarah and her brother called at once on Mrs. Farrar, the wife of the Chief Justice of the State, and by her advice they went for

board and a room for the operation at the mansion of the Widow Brown, she having lost her husband, the former President of Dartmouth.

The operation was done two days afterward in the presence of two medical students and Dr. Corydon La Ford, whom Dr. Mussey had invited in as an assistant. Of Dr. La Ford we are in duty bound to add, that he had suffered from infantile paralysis in early life, and remained paralyzed ever afterward, and whose curious name still puzzles medical genealogists.

The eyes were tightly bandaged, but many visitors were permitted. On the sixteenth day the eyes were unbandaged and Dr. Mussey looked into them and seeing that the capsule had disappeared he clapped his hands and jumped into the air and shouted, "Now, John, if you can see, just pull my nose a bit." This the blind boy did and Dr. Mussey said that his sight was good.

The doctor then bandaged the eyes lightly and sent Sarah and John up the street for a little walk. They had hardly gone a little distance when they saw a carriage approaching and coming near enough to see who was in it they discovered no less a personage than Daniel Webster and his brother Ezekiel. Then it was that the four greeted one another not as "Mr. Webster" or "Mr. Ezekiel," but it was "Daniel" and "Ezekiel," "what brings you here?" After hearty shakings of the hands and a kiss for Sarah, Daniel and his brother explained that Daniel was in Hanover to deliver an address and had brought

his brother as a companion. Then the four made their way back to Mrs. Brown's where the Websters spent a couple of days and supped with the Parrotts that evening and in the morning they breakfasted together. After breakfast, as Sarah tells us in one of her well preserved letters, "Daniel took me aside after breakfast and talked with me an hour about our father's unsettled money affairs," After that Webster asked John about his eyesight and John told him that he could see Daniel Webster perfectly and that he was as handsome a man as he had always thought that he must be from what people had told him when he was blind."

The Websters then had visitors all day long and Daniel delivered his oration in the large

parlor of the hotel and on the following day they drove off for Boscawen and soon afterward the Parrotts returned to Greenland.

It was my good fortune, as a boy in 1857 we will say, to meet Sarah Parrott and brother John often but they never told me a word of this Hanoverian adventure but many a time and oft I went to Greenland and holding Uncle John, as I called him, by the hand, he showed me about the farm and pointed out its beautiful trees, gardens, and fields. And whenever I go to Hanover the close-up picture of the Websters meeting the Parrotts on the campus unfolds itself clearly to my memory and I take this method of describing it for the future.

J. A. S.

*Pre-operative and Post-operative Treatment

By PHILIP P. THOMPSON, M. D., Portland, Maine

Seventy-five years ago it was considered a surgical triumph if a patient survived a major abdominal operation. To-day it is a surgical disaster if the patient operated upon dies. Following Lister we have marched rapidly from antiseptic into aseptic surgery and proficiency in operative technique has reached a high peak. Time has been given us to vastly improve our anaesthesia. From sad experience in the Great War we have come to evaluate our antiseptics. But of most vital interest has been the aid given to surgery by recent studies in bacteriology, physiology and biological chemistry. From researches along these lines we now know that most surgical complications can be prevented or are open to successful treatment if it is promptly and intelligently carried out. It is mainly with these conditions that I wish to deal in this paper, and I must give due credit to the recent splendid book by Dr. Reginald Cutting of New Orleans on this subject.

It has been well stated that:—"When to operate has become as important as *How* to operate." The modern concept in surgical treatment is best expressed by Dr. Cutting, who says:—"To-day operative technique is a distinctly subordinate part of the practice of

surgery, whereas surgical diagnosis, together with that part of the treatment of surgical cases which is conducted outside of the operating room, bulks correspondingly large." Ahead of technical skill comes sound surgical judgment which he says includes: First, a practical knowledge born of experience, of possible complications, second, a comprehensive grasp of the fundamentals of medical science and of humanity, and third that divine gift of common sense to adapt the proper treatment to the individual.

Lord Moynihan some time ago said "The most important person present at any operation is the patient himself" and again that "Modern aseptic surgery has made the operation safe for the patient, it is now the aim of surgery to make the patient safe for the operation." Thank God, the surgeon whose interest in the patient "began with the knife and ended with the safety-pin" cannot exist to-day as he did twenty-five years ago.

Pre-operative Treatment: To-day simplicity has become the watchword in the preparation of the good surgical risk. We have given up preliminary purgation, starvation and the use of stimulants and substituted a regime of

* Read before the annual meeting of the Maine Medical Association, May 28, 1934.

physiological rest. We encourage liquids up to four hours before operation. We are able with the barbiturates or basal anaesthesia to protect the patient from the fear attendant on the trip to the operating room. We have made the hospital environment most attractive and cheerful. There is no comparison between the private rooms of today and those of even ten years ago. Where are the white beds and glaring bareness of yesterday? Now it is all soft browns and greens. The hangings are colorful. There are no enormous pictures of long dead and long-bewhiskered gentlemen on the wall.

Skin Preparation: Real bacteriological sterilization of skin is impossible because bacteria are in the hair follicles. The important point is then that pre-operative skin preparation should not be too rough since too much energy may lower the skin vitality and allow these bacteria to start infection. For the same reason non-irritating antiseptics should be used. The simple regime would be a skillful and careful shaving, absolutely avoiding abrasions, followed by a liberal application and gentle washing with green-soap and warm water, a thorough removal of the soap with sterile water, the surface absolutely dried and then bathed with seventy per cent. alcohol and possibly ether. The application of a sterile dressing depends on the weather and the patient's tendency to perspire. It is usually done.

Mucous membranes cannot even be approximately sterilized so here it is most important to avoid irritation. In operations on the mouth use non-irritating mouth washes and thorough cleaning of the teeth. In operations on the vagina gentle cleansing with soap and water and thorough douching with non-irritating germicidal solution. In operations on the stomach several preliminary lavages and sterile food. Operations on bones and joints and amputations require 48 hours of very careful preparation with the utmost care that the operative area is not contaminated from discharging lesions.

Final skin preparation consists in swabbing the skin with a good fat solvent ether or benzine and then painting it with straight tincture of iodine or a five per cent. picric acid in alcohol. These are inexpensive and proven.

They should be allowed to dry absolutely before draping. It is important that the line of incision should be painted first and never repainted with the same swab, which has touched outside areas.

The Preliminary use of Narcotics: Few people can approach a surgical operation without some feeling of apprehension. Every patient should have before operation a restful, undisturbed sleep. To induce this no hesitation should be made about giving a hypnotic or narcotic. In the past five years more new hypnotics have been presented to us than there are leaves on a tree, among which the safest and least likely to produce idiosyncracies seem to be Nembutal and Luminal in sufficient dosage. The nurse should get up once in a while to be sure the patient is asleep as many people will try not to show their nervousness. If the blood pressure is not low in the morning a second dose may be given unless avertin is to be used. It seems to me that in avertin we have the most splendid and apparently a safe basal anaesthesia. I have used it for two years in many cases without any difficulty. No remembrance whatsoever of the operative journey is in the patient's mind and a minimum of inhalant anaesthesia and often none is required. Of course morphine and atropine, or preliminary to spinal morphine and scopolomine are generally and well used.

I have left until last the most vital item in the pre-operative field: namely, the establishment of a complete full pre-operative diagnosis. It is due to the failure of the average surgeon to either be able or to try to accomplish this fact that the big clinics were established in America. I fear that most of us outside of clinics are sometimes still more remiss than we should be. The surgical operation has become so well understood that more and more physicians are able to perform it and do a very excellent job at it indeed. Isn't it too easy to say this is a hernia, an appendix, a fibroid and call up the hospital and tell them you will operate at 9 A. M. when perhaps a little conversation would determine some family tendency to bleeding, some urinary frequency or some remnant of a cold. A digital rectal exam takes but a moment. It is important in this day of hustle and rush

to still not operate in the presence of severe anemia, jaundice, urinary infection or retention, diabetes, obstruction of the stomach, etc., without adopting appropriate measures to ameliorate these conditions. We should take a careful history, make a thorough examination and observation of a patient's reactions and then do what Dr. Cutting says is most important "if the surgeon will indulge in a quiet mental process and think over the case in regard to the history and findings and try to exclude other possibilities." Somehow we should make ourselves or be made to write a history and physical examination of the patient before and not after the operation.

Scientific Confirmation Tests: Should a case require certain scientific tests we have wonderful equipment to-day. X-Ray, laboratory cystoscopy, protoscopy examinations are at our beck and call. It is damnable surgery to operate a suspicious tumor of the breast without a preliminary X-Ray of the spine, pelvis and thorax. It may avert a bitter tragedy in children under ten to take a thymus plate, especially if they have any congenital deformity. If the patient is obese, has diabetes, jaundice, or has advanced renal or cardiac disease, the medical specialist should prepare him. There is one debatable preliminary test which has helped me out tremendously in the past two years in my determination of the severity of the activity of adnexal diseases in women and their optimum time of operability: namely, the sedimentation test. It has simplicity in its favor.

Post-operative Treatment: It has been well said that the post-operative care should be under proper supervision from the moment the last stitch is tied. Here again, we have given up purgatives and enemata and resorted to physiological rest, the administration of fluids, the use of heat and the rectal tube with proper breathing exercises and careful watching for the serious complications of dehydration, acidosis, ileus, collapsed lung, and the like. Here most can be done by prevention.

Opiates: A patient after a major operation will almost always require an opiate for

the relief of pain and we should remember that in adults any dose of morphine less than gr. $\frac{1}{4}$ or codein gr. 1 has little narcotizing effect. No harm can be done in allowing a hypodermic of morphine gr. $\frac{1}{6}$ to gr. $\frac{1}{4}$ every four to six hours in the first forty-eight hours, and codein thereafter.

Stimulation is nowadays rarely used post-operatively. The older nurses used to call morphine a stimulant and in an inverse way perhaps it is the best. Caffein Sodium Benzoate in gr. VII to gr. XV doses is the one commonly used circulatory stimulant but even that is questionable. Coramine, a nicotine derivative, I have found of value in sudden collapse on the operating table. Carbon dioxide is a real respiratory stimulant. All others may be forgotten.

Shock and collapse have been intensively studied during and since the war by physiologists. All we have learned is that in shock there is a deficiency of blood in actual circulation, the patient having bled into his own capillary bed, so that capillary and tissue cell stasis develop. Here outside of morphine no real help has been obtained from drugs as caffein, camphor, strychnine, or even adrenalin, ephedrine and alpha lobeline. Here, except in hemorrhagic shock, blood transfusions have not helped much. Rest and heat properly applied by the cradle lamps is the best treatment to-day.

Fluids are the most important of all post-operative needs. We may go without food for two or three weeks, but without water usually not over three or four days. Dehydration occurs when there is a diminished intake or excessive output as in continued vomiting, fever or diarrhoea. Clinically the skin becomes dry, the face pinched, the tongue parched and the patient is restless. In advanced stages the red blood cells cannot migrate into the tissues from the capillaries and cell respiration stops and acidosis develops, the patient becoming at first irritable and then drowsy with cyanotic or cherry red lips and headache.

The only logical treatment of this condition is prevention by use of fluids. As the patients cannot usually take fluids by mouth they must

be given by clYSIS either into the rectum, under the skin or into the veins. In the first twenty-four hours after operation it is the best practice to withhold fluids by mouth and give two quarts of fluid either by rectal drip or under the skin. If the case is a hazardous one as in peritonitis, surgery of the intestinal tract, etc., a cannula should be tied in the vein on the operating table.

The different forms of clYSIS are:

1. Proctoclysis—this is the simplest and in ordinary cases is an efficient method. The technique is to have the can two feet above the rectum, a sixteen candle power electric light bulb in the can to keep the solution warm and the tubes run through hot water bag, the drip running about twenty-five to thirty drops a minute. It is allowed to run alternate hours and 2000 c. c. may be given daily using tap water, or normal salt solution.

Hypodermoclysis: Fluids under the skin are best given in the outer thigh between the fascia lata and skin, or in the axilla.

Intravenous Infusion: May be massive or by drip method. Massive infusions were found in the war to be of little value as 50% is gone in five minutes and the blood volume is normal in 1 hour.

Intravenous drip, however, with a cannula tied in the vein using 30-40 drops to the minute of 5% glucose is one of the most miraculous remedies we have in desperate cases, especially peritonitis.

Of course under the skin or intravenously we can use only isotonic solutions that will neither shrink (crenate) nor swell (lake) the blood cells. The two solutions commonly used at present are salt solution (0.85%) or glucose solution 4.76%. Normal salt solution is of much higher concentration than the blood. The addition of salt solution to the blood stream increases the total salt in the blood and is capable of causing considerable damage. In guinea pigs it has been found to cause fatty degeneration of the heart and kidneys in six hours. There is also some danger of sodium poisoning and there may be kidney degeneration with salt retention present and added salt may cause anasarca. . . . In persistent vomiting as after gall-bladder operations there is a marked diminution in chlorides and salt solution is indicated. As salt is normally

absorbed from the large bowel it may well be given by rectum.

The use of Glucose or Dextrose: Glucose is a splendid solution for clYSIS. It supplies a readily available source of energy and spares fat katabolism. It is one of our best diuretics. It supplies antiketogenic bodies. Commercial glucose, dry or as corn syrup, may be used by mouth or by rectum. For subcutaneous or intravenous use only chemically pure glucose may be used. The official name in the last U. S. P. for the chemically pure product is dextrose. If large quantities are used a buffer solution may be necessary as dextrose solutions become slightly acid on sterilization. It is most important that the solutions be given very slowly into the vein about thirty-five drops per minute to avoid "speed shock," a reaction which comes on in about a minute after the introduction and is accompanied by rapid fall in blood pressure, irregular respiration and incoagulability of the blood. In case of diminished chlorides, as persistent vomiting, hemorrhage or diarrhoea, glucose may be given in normal saline but usually it is better given in distilled water. It is questionable if glucose is absorbed by rectum altho some may be if given in salt solution. The intraperitoneal route for the administration of dextrose to infants and children seems to be most advantageous.

The use of insulin with glucose has been strongly advocated of late. It must be remembered that in dehydrated patients it can more rapidly lower the blood sugar to 50, the danger point, and should certainly not be used without frequent blood sugar determinations.

Treatment of Acidosis and Alkalosis: Acidosis following dehydration or loss of blood is best treated by blood transfusion or intravenous glucose and in extremes possibly by intravenous Sodium Bicarb.

Alkalosis following profuse vomiting of large amounts of watery bile stained fluid with marked weakness and low blood pressure is best treated by ammonium chloride by rectum or intravenous salt. Artificial sera as Hartman's Buffer solution are being experimented with.

The laboratory test to determine the degree of acidosis or alkalosis is the carbon dioxide combining power of the blood and its determination is most important in the surgery on diabetics.

The Operative Wound: In clean wounds the scar is not fully organized and firm until about three weeks after operation, but it is usually safe to remove stitches from an abdominal incision on the seventh to tenth day except in obese or elderly patients, or in tubercular or carcinomatous cases. In this latter group of cases and in infected wounds we must still use tension sutures, but in the normal cases I have recently omitted them.

The treatment of infected wounds is perhaps our weakest spot in present day surgery, and while the makers of antiseptics may die hard, I rather feel they are playing a losing battle.

Antiseptics and the Treatment of Infected Wounds: Chemical antiseptics will undoubtedly kill germs in culture or solution and we are well satisfied with their efficiency as satisfactory sterilizers of the skin before operation. It is also rational to believe that they may be of some value if applied to a fresh wound. But with infected wounds conditions are entirely different and it is here that they have failed lamentably. In infected wounds the bacteria have penetrated the tissues to where the antiseptics cannot reach. Also many antiseptics coagulate or even destroy normal tissue and interfere with the phagocytic activity of the leucocytes. The vast experience of the World War showed us the absolute inadequacy of all methods used previously in the treatment of infected wounds and due to the splendid work of Carel and Dakin we were directed toward a most useful form of treatment.

Since the war we have been presented with many new antiseptics: mercurochrome, hexylresorcinol, merthiolate and metaphen in the United States, and the flavines, brilliant green and rivanol in Europe. The relative merits of this group are still open to question. To-day the proven Carel-Dakin treatment must be considered far superior to all other methods. The chlorine, being proteolytic, has a cleansing action not noted in other

antiseptics. Dakin's solution must be made fresh daily in 0.45 to 0.5 solution. If stronger it is irritating and if weaker it is ineffective. It must be so given that there is a flow of chlorine every two hours followed by a rest period and is never given continuously.

Many methods of treatment of infections, such as vaccines, specific proteins, and bacteriophage, have been tried, but the best promise for the future seems to lie in what is called biological antiseptics.

Biological Antisepsis depends entirely upon aiding the physiological or biological agencies which make for natural recovery.

The blood, tissues and plasma are naturally antibacterial (only a few bacteria as streptococci, occasionally staphylococci and diphtheroid germs being able to live therein). If trypsin is added this bactericidal property is lost. Evidently a large part of this bacteriostatic power is due to the presence in the body fluids of antitryptic substances. Leucocytes are able to engulf and destroy bacteria, but old pus cells lose this ability, become immobile, and together with dead body cells liberate trypsin, which is capable of dissolving slough and helping to cleanse the wound.

Nature's process of fighting infection is evidently an alternating process of antitryptic and tryptic action. Hypertonic solutions stimulate dissolution of pus cells and formation of trypsin but should be used with intervals of rest to allow antitryptic tissue powers to recuperate. They also aid against infection by stimulating osmosis and the flow of antibacterial serum. The actual method of use is to apply wet, saturated, hot, 110° F. dressings of hypertonic $MgSO_4$ (using four tablespoonfuls to a quart of sterile water) for twenty minutes and to keep them wet and hot with an electric cradle and then have two hours of rest between applications.

Heat increases chemical activity and the blood supply of the part, both of which aid in overcoming wound infection. As so far conceived, biological antisepsis advises four things: First, removal of all macroscopic dead material and the opening up of pockets. Second, the use of hypertonic solutions. Third, absolute rest intervals. Fourth, heat.

ABDOMINAL DISTENTION AND GAS PAINS

The acute gas pains of course come from ineffective peristaltic movements in distended intestines. They practically always follow abdominal operations and occur especially after gall bladder surgery. They usually do not develop until the second or third post-operative day. It is a known fact that on opening the abdominal cavity there is an immediate cessation of intestinal movements. After the abdomen is closed it is believed that intestines do not soon regain functional activity. Mechanical handling also lengthens intestinal ileus. Probably morphine has nothing to do with it. Experimental evidence shows the use of opiates has very little influence on the development of distention.

We know that gas pains may be made worse by mechanical trauma, the deleterious action of cathartics, or possibly proctoclysis. Gas is expelled with greater difficulty than liquids or solids. The origin of gas in the intestines may be threefold: a decomposition of foodstuffs, a diffusion of gas from the blood stream, or from swallowed air. Strange to say, very careful experiments show that the gas in post-operative distention is but a small proportion carbon dioxide which would come from food decomposition but is largely nitrogen and oxygen and must come from swallowed atmospheric air. In unskillful induction of general anaesthesia the patient may strain, gag and swallow. After each expulsion there is a corresponding impulsion. In the reaction from the anaesthetic, preliminary gulping and air swallowing precedes vomiting or attempts to vomit.

Spinal anaesthesia gives a minimum of gas pains. In general anaesthesia there is maximal paralysis of the intestinal walls and air swallowing is facilitated. Avoidance of all unnecessary trauma has caused a marked decrease in the severity of gas pains.

The rational treatment of gas pains and distention must be based on our knowledge of the cause and physiology which seems definitely proven. Stasis is due to trauma and shock, the gas is mainly atmospheric air and the accumulation of gas after operations is dissipated mainly not by mechanical expulsion or evacuation but by absorption into the blood stream. We must acknowledge the failure and perhaps harm of our three older

methods of treatment, namely: Early purgation, the use of enemata and the use of stimulating drugs. While some still believe, as did so eminent a surgeon as the late Dr. Graves of Boston, in the early post-operative use of calomel, most surgeons now give no laxatives in the first three to five post-operative days. The discussions of the best post-operative enemata, which occupied our odd moments up to five years ago, have died away, although most of us still have a lingering love for milk and molasses, oil and glycerine, or the old soap suds. Outside of plain warm oil or tap water enema, they cannot but cause irritation and do no more good than the rectal tube. The hypodermic use of stimulating drugs for intestinal stasis started back fifty years ago with the discovery of the effect of the active principle of the Calabar bean, eserine and physostigmine, and received added impetus in later years with the advent of Pituitrin. We have had peristalsin, the soluble glucoside of cascara and the chlorines. All have occasionally seemed to work but all have been generally unsatisfactory as their action is so slight as to be usually a disappointment. More have we come to use the rectal tube, the stomach and duodenal tube and heat. Hot turpentine stupes and hot flaxseeds we know help to give the patient comfort and relief, but unfortunately the abdominal dressings do not allow sufficient application. We have a form of heat which is ideal, however, and that is the cradle with electric lights. It takes the weight of the bed clothes off the abdomen and if the heat is kept at 100 it gives wonderful relief of pain and distention. Try it.

POST-OPERATIVE PULMONARY COMPLICATIONS.

About two per cent. of all cases operated upon develop post-operative pulmonary complications, while in operations on the upper abdomen the rate rises to eight and ten per cent. As to the cause, it is first definitely proven that ether itself is incapable of producing the tissue changes found in post-operative lung complications, so there is no such thing as "ether pneumonia." If aspiration of germs from the mouth is the cause, the less gagging and vomiting we have from the anaesthetic and the use of the Trendelenberg

position for better lung drainage are especially desirable.

The atelectatic theory of lung complications is most interesting and is becoming more widely considered. Due probably to a plug of mucus in the bronchus, and the inhibition of the cough reflex, any part of the lung from a lobule to a lobe may collapse.

The various lung complications may be described as follows:

1. *Post-operative pneumonia*, which comes on six to ten hours after the operation, there is no great pleural pain but a very rapid rise of pulse and temperature. It is usually due to the type four pneumococcus and is of short duration. The best treatment is the upright position, the oxygen tent in winter and fresh air in summer.

2. *Pulmonary Infarction*, usually occurs from ten to fourteen days following operation. Right after operation there is apt to be a week of slight temperature, then several days of normal. Its onset is marked by sudden sharp pain in the chest, temperature, cough and raising of blood. It is often accompanied by a femoral phlebitis.

3. *Thrombotic Pulmonary Embolism* comes suddenly at the end of the second or third week just as the patient is getting up or going home. The symptoms are faintness and dyspnoea with precordial pain and cold sweating and definite cyanosis. It usually ends fatally. The treatment is morphine and oxygen.

4. *Massive collapse of lung* is now a commonly recognized condition which may follow spinal and local as well as general anaesthesia. The symptoms depend on the amount of lung tissue involved. It usually comes on within two or three days of operation. There is some pain in the chest, a rapid pulse and respiration, and profuse sweating. Frequently the cheeks have a brick red color. There may be no temperature at first, but it soon rises to 103 or 104. The patient lies on the affected side with the head bent towards affected side, which looks smaller. There is cough and a moderate amount of sputum which is not bloody. The X-ray picture is characteristic, there being concavity of the

dorsal vertebra to the affected side with converging ribs and displaced heart and elevated dome of diaphragm. Complete disappearance usually takes place in three or four days. There is no treatment of much avail although many believe in violent slapping of the back, with the patient on the affected side in an attempt to dislodge the mucous plug.

Prophylactic treatment is most important in dealing with lung complications. Operations should, of course, be avoided if possible when there has been any recent respiratory infection. Avoid abdominal distention, use de-etherization and have the patient take deep breathing exercises for five minutes each hour for the first two post-operative days.

De-etherization is the use, immediately following the operation, of 5% to 10% carbon dioxide gas in oxygen. Be sure to use an inhaler with an expiratory valve. Enough can be given while the post-operative dressings are applied to eliminate a great deal of the anaesthetic, and the deep breathing excursions help to dislodge mucus from the bronchial tubes.

DILATATION OF STOMACH

The mechanism of its development is not well understood. It usually comes on the second or third post-operative day. The patient begins to spill from the mouth quantities of brownish or bottle green fluid. If he gets no relief this flow becomes almost constant. The left upper abdomen is distended and dull on percussion. If a stomach tube is passed one or two quarts of dirty fluid may be obtained. If not stopped, the patient becomes thirsty and dehydrated and may rapidly go into collapse.

Prompt treatment generally is rewarded by satisfactory results. The stomach is washed out and salt solution is given by rectum or under the skin. If the vomiting persists a duodenal tube is left in and clysis continued.

URINARY RETENTION

The following methods are helpful in treating urinary retention:

1. Hot stupes to lower abdomen.
2. Douching external genitalia with warm water.

3. Small hot enema, 4 oz. (temp. 112° F.).
4. Frequent changes of patient's position.
5. Sound of running water. If the retention persists, catheterize after sixteen hours. One ounce of sterile glycerine (Ochsner) in-

stilled into bladder at the first catheterization may help the patient to urinate. If repeated catheterizations are needed, one ounce of 1% silver nitrate or 20% argyrol may be each time left in the bladder.

Report of a Case of Tetanus Followed by Agranulocytic Angina

By JAMES REED, M. D., Bridgton, Maine

The patient, a white female of twelve, was admitted to the Franklin County Memorial Hospital on August 11, 1933, complaining of inability to open her jaws and of a pain in her back.

Questioning revealed that nine days previous to admission, the patient in crossing a pasture had fallen, sticking a small piece of wood into the left leg. The injury was apparently trivial and no further attention was paid to the wound other than to put mercurchrome on it. The wound caused no discomfort and no symptoms were noted until the afternoon previous to admission, when she complained of her jaws being stiff. That night she was able to eat practically nothing because of difficulty in mastication. She slept well but upon the following morning she could hardly open her jaws and she complained of pain in the back and chest. The family physician was then, for the first time, consulted and immediate hospitalization was advised. There were no upper respiratory symptoms and no vomiting.

A review of the systems were entirely negative, as was the past history. The family history was irrelevant.

Physical examination at the time of admission was as follows: Temperature 101.8, pulse 120, respirations 27, blood pressure 106 systolic, 68 diastolic. The patient was a well developed and well nourished white female of twelve, lying quietly in bed with flushed face, alert, and highly apprehensive.

Ears—negative.

Nose—no obstruction, slight dried discharge.

Eyes—no ptosis or nystagmus, pupils equal, regular, and active to light and accommodation. Fundi normal.

Mouth—lips of good color. No herpes.

The jaws could only be opened about a third of the normal distance, and the patient complained of pain during the attempt. The tongue was clear.

Pharynx—could be seen but poorly and showed no exudate.

Neck—very slight stiffness, no spasm of the muscles, no thyroid enlargement or visible pulsation.

Chest—expanded equally. Respirations were rapid and shallow. Lungs were clear to percussion and auscultation throughout. Heart not enlarged to percussion, regular, rate increased. The sounds were of good quality, no murmurs.

Abdomen—was relaxed, without tenderness. No organs or masses were palpable.

Extremities—on the anterior aspect of the left leg, about ten centimeters below the knee, there was a small puncture wound, surrounded by a small area of tenderness, but without induration or redness.

Glands—no generalized or local adenopathy.

Skin—clear.

Genitalia—normal female.

Reflexes:

	<i>Left</i>	<i>Right</i>
Biceps	*	*
Triceps	*	*
Abdominal	*	*
Patellar	****	****
Achilles	**	**
Babinski	0	0

No Chvostek's or Trousseau's sign was elicited. There was a well sustained ankle clonus on the right and a marked ankle and leg clonus on the left.

Admission laboratory findings: WBC 12,200, P. 75%, SL. 20%, LL. 5%, RBC

4,500,000, Hgb. 86%. Urine clear, straw colored, specific gravity 1016, albumen negative, sugar negative, sediment negative. Spinal fluid clear. Pandy negative. Cell count 5. Lymphocytes, 4. Neutrophils, 1.

The diagnosis of generalized tetanus was made and the problem of specific treatment and control of convulsions then presented itself.

TREATMENT

Following examination the patient was weighed and measured and the surface area computed for Avertin administration.

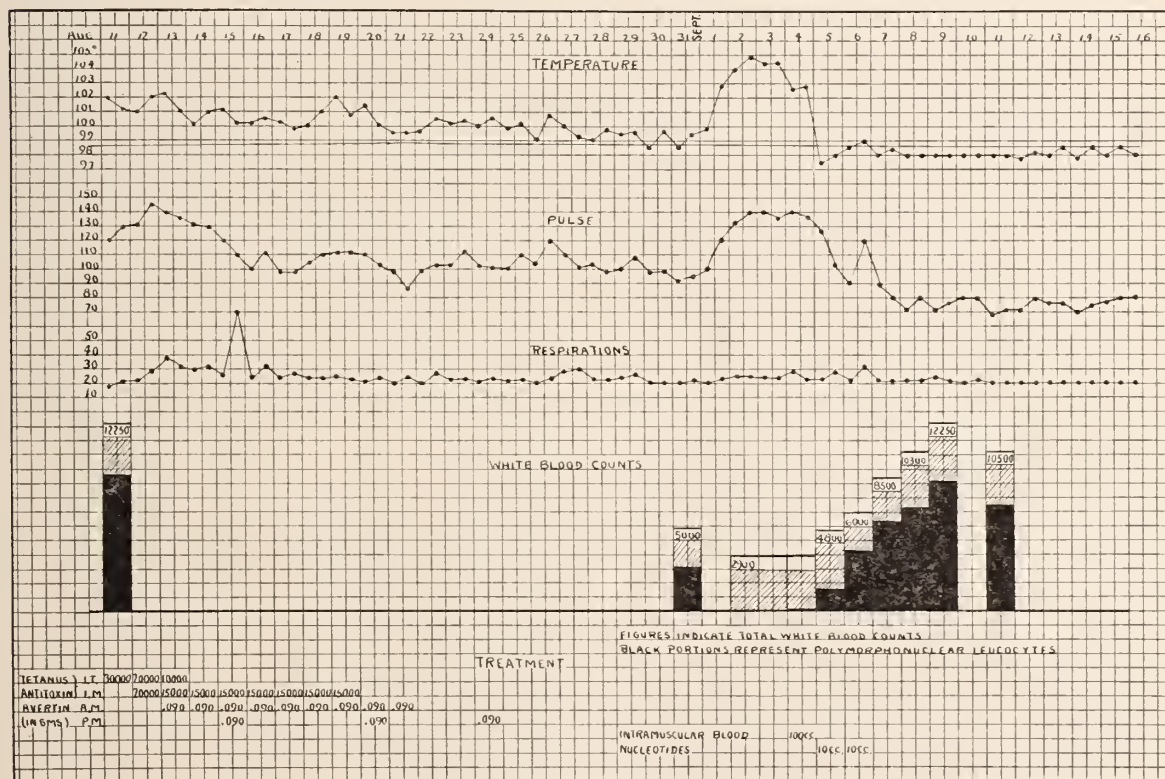
Lumbar puncture was performed and thirty thousand units of tetanus antitoxin were given intraspinally. Antitoxin was then administered daily for the next nine days, both intraspinally and intramuscularly, until a total of 185,000 units had been given.

For the first two days an attempt was made to control the patient's restlessness by general measures and Sodium-Luminal intramuscularly, a total of twenty grains being given in the first forty hours.

On the third morning, following a generalized convulsion, Avertin was administered and continued for the next nine days, once or twice daily.

The patient became unable to take even fluids by mouth, and intravenous fluids were given daily until the Avertin administration was stopped.

With the onset of Neutropenia on the twenty-second day, she was given 100 cc. of whole blood intramuscularly and on each of the following two days 10 cc. of Nucleotides also intramuscularly.



The chart shows the procedures outlined above as well as the pulse, temperature, respiration, and blood counts in the proper relationship.

COURSE IN HOSPITAL

On the day of admission the patient was extremely restless and unable to lie quietly in

bed in spite of the heavy Sodium-Luminal dosage. She complained bitterly of headache and pain in the back. Much difficulty was encountered on attempting to swallow because of clonic contraction of the muscles of the face and neck. Her condition remained much the same until the morning of the third

hospital day when she had a generalized convulsion with opisthotonos which lasted for about fifteen minutes. Shortly after Avertin was administered and for the first time since admission, complete relaxation was obtained and the child rested quietly. During the day two attempts were made to pass a tube through the nose for feeding. Each attempt, however, resulted in a short convulsion and the procedure was abandoned. During the night the patient was very restless, and on the following morning had several attacks of generalized tremors, followed by rigidity which could not be considered more than mild convulsions. Avertin was again given and complete relaxation again secured which lasted for about six hours, when she again became restless and continued that way during the night. The next morning Avertin was given. The patient remained quiet until about two o'clock in the afternoon when a generalized convulsion took place, accompanied by opisthotonos, marked cyanosis and very rapid respiration which went above seventy per minute. After the seizure subsided, hyperventilation continued at the same rate for about twenty minutes until oxygen was given, with a return to normal rate in ten minutes. It was necessary to again give Avertin late in the afternoon for the second time that day.

From that time on the patient was well controlled with one treatment of Avertin daily until the tenth day when a bright pink urticarial rash appeared over the entire body, and the patient was so restless that Avertin had to be used twice. The rash was obviously that of serum sickness, and as a total of 185,000 units of antitoxin had been given, specific treatment was discontinued.

On the twelfth day the patient appeared much quieter and exhibited no muscle spasms or jerking. No Avertin was given and during the morning she awoke and spoke for the first time since Avertin was started, asking for water, which she took without difficulty, being able to open her jaws to almost the normal extent. For the next several days she was nervous, emotional and cried frequently. No muscle spasms occurred, however, and she was able to take fluids well by mouth. There was no stiffness of the neck or back but marked hyperactivity of all re-

flexes was present. On the fifteenth day restlessness was so marked that Avertin was given once more.

The serum sickness gradually subsided with disappearance of the rash. The patient became much more stable mentally and emotionally, took food well and sat up in bed, apparently convalescing uneventfully. Vital signs were normal and it was planned to discharge her shortly. On the twenty-first day, however, the temperature rose to 102.8 with no apparent cause. She had no complaints and physical examination was entirely negative, except for a slight swelling and redness of the left finger, which seemed to involve more the base of the nail bed than the first joint. In spite of this and the fact that no definite joint involvement could be found, it was felt that the patient was about to develop joint manifestations of serum sickness and no serious concern was felt. On the following day the temperature rose to 104.8 and a white blood count showed a total of 2,950 cells with a complete absence of polymorphonuclear cells. At this time, it seemed possible that the neutropenia might be accounted for by the heavy dosage and the resulting serum sickness, although it seemed somewhat doubtful that this would account for a total absence of polymorphonuclear cells. The patient complained of no joint pains, and careful examination of the joints was still negative as was the general examination except for the swelling around the nail bed of the left first finger, which was apparently a paronychia. This was incised and the finger soaked in a hot saturated solution of magnesium sulphate. There was no evidence of lymphangitis and the blood culture which was taken was subsequently found negative. On the next morning she complained of soreness of the tongue and on examination two small ulcerations were found on the lateral aspect of the tongue and one small ulceration on the vulva. That afternoon a crop of vesicles appeared on the face, eight in number, and located mostly around the mouth. The lesions varied from $\frac{1}{2}$ to $1\frac{1}{2}$ centimeters in diameter, a heavy cream color in the center and were surrounded by a pale pink circle on the periphery about $\frac{1}{4}$ centimeter in width. Again no polymorphonuclear cells could be found.

During the day she complained of abdominal pain and had five liquid bowel movements. A diagnosis of agranulocytic angina seemed justifiable and Nucleotides were sent for. In the meantime, on the following morning the patient was given 100cc. of whole blood intramuscularly. The total white count remained the same but three young polymorphonuclear cells were found in the smear. The temperature fell that day and the next day was down to normal but because of the fact that the blood picture had not changed Nucleotides were given in the morning, 10 cc. intramuscularly. That afternoon the white blood count which had been below 3,000 with no polymorphonuclear cells rose to 4,800 with thirty per cent. polymorphonuclear cells. The temperature remained normal on the following day. Nucleotides were again given and a further rise in white blood cells resulted as shown on the chart.

From that time on the white blood cells

and the per cent. of polymorphonuclear cells rose daily. The temperature remained normal and the lesions on the face and ulcerations on the mucous membranes healed gradually without local treatment. The patient was discharged thirty-six days after admission and sixteen days after the onset of the agranulocytic angina.

SUMMARY

This patient had a well-developed case of generalized tetanus. The convulsions were satisfactorily controlled with Avertin. The specific infection was cured with 185,000 units of Antitoxin. Serum sickness developed on the tenth day without joint involvement. Agranulocytic angina developed on the twenty-first day with neutropenia on the twenty-second and skin lesions and ulcerations on the twenty-third. Remission was spontaneous.

Transactions of House of Delegates

At the 1934 Annual Session the House of Delegates transacted the following business:

1. The sum of \$4,140.00 was accepted to cover the budget for the coming year, an increase of \$40.00 over last year's appropriation.
2. Drs. W. H. Bunker of Calais and J. G. Potter of Houlton were elected Councilors of the 5th and 6th Districts, respectively.
3. The following resolutions were passed: Birth Control (approving the principle, etc.); Protest to Measures Against Men of the Hebrew Race Instituted by the Present Nazi Government; and Resolution Opposing the Exploitation of Drugs, Remedies, etc., over the Radio.
4. A motion was passed concerning the ineffectiveness of the present Food Handlers' law.
5. It was voted that the President appoint a committee to study the question of

changes to be advised in the practice of medicine as we now know it, that committee to be responsible to the President, the Council, and the House of Delegates.

6. It was voted to recommend to the committee which decides the place and time of future annual sessions to hold them at Resorts and that one or more clinical sessions be held during the year in places in different parts of the State that are available for clinical work.
7. It was voted that the place and date of the next annual meeting be left to the Council in collaboration with the Scientific Committee.
8. Voted, To change Chapter V, Section 1, of our By-Laws, to read: "The President shall preside at all meetings of the Association and shall appoint all committees not otherwise provided for; he *may* deliver an annual address at such time as may be arranged, and shall perform such other duties as custom and parliamentary usage may require."

9. The report of the Nominating Committee was presented and accepted as follows:

COMMITTEES

Scientific Committee—Frederick T. Hill, Waterville; George O. Cummings, Portland; T. S. Moise, Bangor; C. H. Jameson, Rockland.

Medical Education and Hospital—Frederick W. Mitchell, Houlton; Stephen Brown, Portland; C. J. Hedin, Bangor.

Medical Advisory Committee—E. G. Abbott, Portland; E. D. Merrill, Dover-Foxcroft; Allan Woodcock, Bangor; W. Bean Moulton, Portland; George E. Young, Skowhegan; E. V. Call, Lewiston; W. G. Chamberlain, Fort Fairfield.

Legislative Committee—John L. Johnson, Bangor; L. P. Gerrish, Lisbon Falls; Freeman E. Bennett, Presque Isle.

Committee, Public Relations — H. C. Knowlton, Bangor; George R. Campbell, Augusta; Arthur Whitney, Houlton; True Makepeace, Farmington; Franklin A. Ferguson, Portland.

Committee on Cancer — William Holt, Portland; R. W. Wakefield, Bar Harbor; E. H. Risley, Waterville; H. E. Thompson, Bangor; Julius Gottlieb, Lewiston; Barbara Hunt, Bangor.

Committee on Nursing Affairs—F. H. Jackson, Houlton; Stephen Brown, Portland; L. H. Smith, Winterport; Wallace E. Webber, Lewiston.

Memorials—Thomas A. Foster, Portland; E. H. Bennett, Lubec; E. G. A. Stetson, Brunswick.

Social Hygiene — Clarence Kendall, Biddeford; E. S. Merrill, Bangor; C. N. Peters, Portland.

Delegate, American Medical Association—(1935 and 1936) W. E. Kershner, Bath. Alternate, William Ellingwood, Rockland.

Delegates to State Societies—New Hampshire, Charles W. Kinghorn, Kittery; Vermont, S. A. Cobb, Sanford; Massachusetts, F. B. Ames, Bangor; Connecticut, T. A. Foster, Portland; Rhode Island, John Piper, Waterville.

Necrologist—J. A. Spalding, Portland.

Committee on Study of Maternal Mortality (Special Committee)—Roland B. Moore, Portland; Ralph L. Reynolds, Waterville; Charles D. North, Rockland; Magnus Ridlon, Bangor; Samuel R. Webber, Calais.

Necrology

Harry Whipple Johnson, Bangor, 1880-1934

The parents of our departed fellow member would be proud of his career, for born September, 1880, he carried out to success a remarkable career as an Eye, Nose and Throat specialist in more than one place in Maine and ended in Bangor. Born in Lee, he studied there and at Higgins Classical Institute, was graduated at the College of Physicians and Surgeons in Baltimore in 1908, and post-graduate courses in New York, Pennsylvania, and four years of extensive army medical practice. He seems to have been of a roving disposition for he practiced in Pembroke, Wytovitlock, Hampden, and Bangor, plus the four years in connection with the army service, where he learned discipline and steadiness. Dr. Johnson, much lamented, is survived by a widow, who was Miss Dorothy M. Carlton of Hampden.

J. A. S.



The President's Page

*Stop * * Look * * Listen*

TO THE MEMBERS OF THE MAINE MEDICAL ASSOCIATION:

NEVER SIGN EITHER A CONTRACT OR A NOTE WITH ANY COLLECTOR'S AGENCY, IN-STATE OR OUT-OF-STATE, NO MATTER BY WHOM SUCH AGENCY IS RECOMMENDED. ANY SOLICITOR OR AGENT WHO WANTS YOUR ACCOUNTS FOR COLLECTION SHOULD AROUSE YOUR SUSPICION AT ONCE IF HE ASKS FOR YOUR SIGNATURE EITHER TO A NOTE OR A CONTRACT. LEGITIMATE COLLECTION BUSINESS DOES NOT HAVE RECOURSE TO NOTES OR CONTRACTS.

FAILURE TO APPRECIATE THE FOREGOING IS RESPONSIBLE YEARLY FOR THE LOSS OF THOUSANDS OF HARD-EARNED DOLLARS TO MAINE PHYSICIANS.

IN THE FUTURE, BEFORE YOU PLACE ANY ACCOUNTS FOR COLLECTION WITH ANYBODY, WRITE THE SECRETARY OF YOUR STATE ASSOCIATION FOR INFORMATION CONCERNING THE PERSON OR FIRM IN QUESTION. TO RENDER SUCH SERVICE TO OUR MEMBERS IS ONE OF THE DUTIES OF OUR COUNCIL. MOREOVER, TO RECEIVE SUCH SERVICE IS ONE OF THE PRIVILEGES WHICH MEMBERSHIP IN A COMPONENT COUNTY MEDICAL SOCIETY CONFERS.

REMEMBER! SOLICITORS OR AGENTS OR COLLECTORS ARE MORE OR LESS CONSTANTLY IN OUR MIDST. THEIR SCHEMES FOR GETTING MONEY WHERE OTHERS, INCLUDING YOURSELF, HAVE FAILED, ARE INTRIGUING AND LEGAL. HOWEVER ALLURING THEY MAY SOUND, IF THEY INVOLVE THE SIGNING OF A CONTRACT OR A NOTE, REFUSE TO CONSIDER THEM ALTHOUGH THEY MAY BE SPONSORED BY GROUPS OF PHYSICIANS OR CHAMBERS OF COMMERCE.

IN EVERY INSTANCE, CONSULT YOUR STATE ASSOCIATION'S SECRETARY AND HAVE YOUR EYES OPENED, BUT DON'T SIGN A NOTE OR A CONTRACT.

E. W. GEHRING.

Abstracts

"Diaphragmatic Hernia: Medical and Surgical Treatment"

By S. ALLEN WILKINSON, M. D.

N. E. J. Med., Vol. 210, p. 1105.

May 24, 1934

Seventy cases observed in seven years at the Lahey Clinic form the basis of this report. Sixty-seven of these hernias contained stomach only; one contained stomach and a strangulated loop of small intestine, and one only the splenic flexure of the colon. No definite diagnostic syndrome or symptom complex could be found. The smaller herniae in general caused symptoms simulating peptic ulcer (79% of gastric herniae had 20% or less of the stomach above the diaphragm), less often gall bladder lesion, reflex disturbance of the stomach due to irritable colon, and simple hyperchlorhydria. Large hernias are more apt to cause obstructive symptoms or disturbance in the chest such as dyspnea, substernal pain, heart pain, or dysphagia. Hence the diagnosis depends entirely on the use of the roentgen ray, the patient lying flat or in Trendelenberg position. Six duodenal, one gastric, and three esophageal or hernial ulcers were found in the group. Symptomatic medical treatment using the methods of ulcer and bowel management gave relief in 48 of the 51 cases in which it was tried. The first principle in surgical treatment is phrenicotomy which in a few cases gave symptomatic relief. Abdominal repair should be postponed until after this procedure has been found unsatisfactory.

R. S. H.

"Sensitization Tests: Their Value in Dermatology"

Archives of Dermatology and Syphilology,

June, 1934

H. V. MENDALSCHIN, M. D.

This report represents the result of an allergic study of certain cutaneous diseases over a period of four years. In all, 262 cases were studied. The dermatoses included eczema, urticaria and dermatitis venenata (80% of the cases), also prurigo, erythema multiforme, angioneurotic edema, and neurodermatitis. The cases selected were those in which an allergic cause was suspected. The study was performed by taking careful histories, and performing intradermal tests, patch tests and passive transfer tests.

A diagnosis in allergy is based on four cardinal principles, usually more than one principle operating in a particular case: 1. contact—a history of a morbid process on contact with a suspected substance. 2. removal: the disappearance of symptoms on the avoidance of the substance. 3. tests by injection or ingestion; the production of symptoms on the injection (of pollens in hay fever) or ingestion (of foods in specific dermatoses). 4. therapeutic injections, the relief of symptoms by the injection of increasing amounts of an extract of the substance to which the person has been found sensitive (desensitization). It is evident, then, that the mere finding of a positive reaction to some substance with any method of cutaneous testing is of no diagnostic significance unless the aforementioned principles are demonstrated.

The intradermal test is considered more reliable than the scratch method, however it was found that the former test, even so, had little value in

demonstrating the cause of cutaneous diseases. Also it was found that a great number of positive intradermal reactions are obtained, but they are rarely of practical significance. Positive reactions to food substances or inhalants administered intradermally in patients with cutaneous diseases are far less specific than similar reactions to pollens in patients with hay fever.

The so-called allergic dermatoses are a purely dermatologic problem and the factors constituting their etiology are many. They include disturbances in the vascular system, changes in the chemistry of the blood and skin, the neurogenic status, faulty metabolism focal infection, endocrine dysfunction and other as yet undetermined factors undoubtedly. To consider a positive cutaneous reaction in these diseases of paramount diagnostic importance not only would be contrary to the accepted principles of immunology but would show a disregard for established clinical dermatologic evidence.

Patch tests are of decided value, especially in cutaneous diseases which are due to external irritants.

D. H. D.

"Plastic Closure of Laryngostomic Fistulas and Enlargement of the Lumen of the Trachea, or Larynx, by Implantation of a Chondriticaneous Flap"

Babcock.

Archives of Otolaryngology, May, 1934.

The author describes a very ingenious operation for the closure of laryngostomic fistulas resulting from high tracheotomy designed to avoid secondary obstruction due to curling in of the divided tracheal rings and to falling in of an unsupported graft. He forms a flap lined with skin and stiffened by curved segments of cartilage taken from the concha. This is "jumped" over an island of intervening skin.

F. T. H.

"Primary Thrombosis of the Axillary Vein Caused by Strain"

RUDOLPH MATAS, M. D.

The American Journal of Surgery, June, 1934.

A single case is reviewed in detail. The clinical picture presents double interest from the fact that it involves workman's compensation. The writer states that the surgeons consulted by the opposing counsel "had only a vague knowledge of that curious and enigmatical lesion of the axillary vein which was first clearly recognized as a clinical entity by Schrotter, a German writer, in 1894."

The distinctive features of the condition briefly stated follow. Patient as a rule is a young, muscular individual engaged in vigorous muscular effort. The symptoms ensue rapidly after unusual physical strain. The arm swells with cyanosis, rarely pallor. Doughy edema deforms the arm and hand. Pain is common in the whole arm, especially when the axilla is compressed along the cord of thickened axillary vessels. Striking is the suddenness of the attack and the rapidity with which edema ensues. Complete disability in use of the

arm follows almost immediately after the unusual strain or more often after a seemingly trivial muscular effort.

Sudden, spontaneous Thrombosis of the axillary vein is very rare but does occur as a result of habitual occupational strain. These cases fail to enter the category of disability caused by accident.

Thrombosis of vessels of the upper extremity is comparatively rare and reported cases infrequent. The writer believes that Peggi's list of 74 cases found in the literature could be increased perhaps to 100.

Causation is attributed to:

1. Trauma; overstretching of axillary vein between the clavicle and the first rib, the costo-coracoid ligament and the subclavius muscle. This etiology is probably paramount in the majority of cases with predisposing factors in gout, grippe, rheumatism, chronic lead poisoning, bacteriemias, etc.

2. Infection; this factor has been commonly accepted despite clinical and bacteriological evidence to the contrary. The writer conceives it to be an uncommon causation agent.

3. Sympathetic theory; most recently advanced by Cottalorda and probably through venospasm has its influence in severe cases.

Diagnosis is not difficult.

1. History of accident or strain.
2. Edematous swelling of affected arm ensuing a few hours or later.
3. Lividity or pale cyanosis of the affected arm—rarely pallor.
4. Development of collateral circulation.
5. Presence in axilla of palpable, tender cord in course of axillary vein.

Prognosis: The prognosis for life is favorable. The duration of disability is variable. In the majority of cases disability is counted in months and relapse is common upon return to the previous occupation.

Treatment: Relief is usually attained by rest, immobilization, bandaging, elevation, physiotherapy. Treatment of underlying causes is indicated. Protracted cases are improved by Thrombectomy. The best results have been obtained by excision of the thrombotic venous segment.

Here is a clear presentation of a somewhat unusual condition interesting in itself, complete in its historical reference, couched in clear, beautiful English with real "style" by a master in the field of vascular surgery.

C. H. J.

"Beriberi Following Drastic Voluntary Dietary Restriction"

DAVID REISMAN, M.D., and HAROLD S. DAVIDSON, M.D.
Journal A. M. A., June 16, 1933, Vol. 162, No. 24.

Beriberi, although a tropical disease, occurs sporadically, due generally to the restriction to a monotonous diet for one reason or another.

There are the wet and dry types of the disease, the latter occurring as acute polyneuritis. The former is characterized by edema of the extremities that is painful to the touch and an enlargement of the heart to the right.

The cases under consideration were: 1. A patient who after continued gastric trouble eliminated all food except milk from his diet and developed the wet form. His symptoms cleared up after administration of vitamine B. 2. A vegetarian began to develop beriberi symptoms which cleared after a vitamine diet. 3. A negro woman on a diet of cornstarch developed similar symptoms, recovering on proper dietary treatment. 4. A patient

with typhoid never became free from indigestion until restricted diet with vitamine deficiency was corrected. 5. A case is presented of the wet type with cardiac symptoms. Inclusion of necessary Vitamines resulted in recovery.

In cardiac disturbances associated with edema a careful history of patient's diet should be taken.

J. G.

"The Endocrine Effects of Certain Ovarian Tumors"

By EMIL NOVAK, M. D. (Gyn. Dept. Johns Hopkins).
American Journal of Medical Sciences, May, 1934.

Adenomata of the pituitary gland have been shown to be responsible for the production of such syndromes as precocious puberty and virilism. The undesirable effects of such syndromes have been removed by the excision of the tumor. Cushing has pointed out that even very tiny tumors may produce gross effects, the explanation being that these tumor cells overfunction, bringing about violent endocrine upheaval.

This paper points out that similarly, certain ovarian tumors possess the capacity of over-feminizing the individual, while others produce changes which defeminize or masculinize female patients.

First are the Granulosa cell tumors of the ovary. These are found more commonly in elderly patients, but may occur even in young children. These tumors arise from epithelium of the follicles which have not been used up in the formation of follicles of the ovary. This epithelium is a source of the female sex hormone folliculin (or oestrin), so that it is not surprising that these tumors have a distinct feminizing tendency.

When these tumors occur in women well beyond the menopause, they produce a characteristic periodic bleeding, resembling the re-establishment of menstruation. Uterine scrapings show the hyperplasia of functional uterine bleeding, and the ovaries show the characteristic absence of corpora lutea. This pseudo menstruation has an etiological background in dysfunction of the pituitary.

The clinical symptoms and the uterine changes associated with these granulosa cell tumors of the ovary, in very old women, are exactly similar to those associated with excessive oestrine production in women of reproductive age. Hence the rejuvenation changes in the pelvic organs.

For the same reason, when these tumors occur in young children, there is precocious puberty and menstruation, with overdevelopment of the breasts, external genitalia and uterus, hair of the pubes and axilla and early development of the feminine bodily contour.

There is another group of tumors which produce the opposite effects upon sex characteristics, having a masculinizing effect on the individual. It has long been known that certain tumors of the pituitary and pineal body and suprarenals may cause the loss of feminine characteristics to a more or less degree.

In the ovary, the tumors that have this effect are rather rare tumors called testicular adenomata or arrhenoblastomata. These present a sarcoma-like picture. They have their origin from an undifferentiated epithelium, which during the development of the ovary in the embryo have assumed definite masculine tendencies.

Patients suffering from arrhenoblastomata may present breast atrophy and amenorrhea and even deepening of the voice, hypertrophy of the clitoris, male distribution of hair, etc.

While both the granulosa cells, tumors and arrhenoblastomata are classed as malignant, clinically in the majority of cases they have proved benign. Their removal has brought about complete cure, with return of normal characteristics.

H. S.

News and Notes

Aroostook and Penobscot

A joint meeting of the Aroostook and Penobscot County Medical Societies was held June 19, 1934, at the Hotel Northland, Houlton.

The business meeting of the Aroostook County Medical Society was opened by the President, Dr. Storer Boone of Presque Isle. The following officers were elected for the coming year:

President—Loren Carter, Presque Isle.

Vice-President—A. K. Curtis, Danforth.

Secretary-Treasurer—A. T. Whitney, Houlton.

Legislative Committee—Drs. F. W. Mitchell, Houlton, and F. E. Bennett, Presque Isle.

Delegate to M. M. A.—Drs. S. Boone, L. Carter, Presque Isle.

To Board of Censors—Dr. P. L. B. Ebbett, Houlton.

The first speaker for the day was Dr. Alec Graves of Presque Isle, who gave an interesting and instructive talk on "Nephrolithiasis," demonstrating many of his points by X-Ray plates.

Dr. Frank H. Jackson of Houlton then gave several case presentations of surgical cases, among which were an abnormally large cystic goitre, a gun-shot wound of the neck with some interesting neurological residuals and lastly three cases of rupture and subsequent repair of the supraspinatus tendon.

The societies were happy to have with them the President of the Maine Medical Association, Doctor Edward Gehring of Portland, who gave a most enlightening report on "Birth Control"; he stressed the necessity of the medical profession taking an active, interested part in this great social and economic problem.

After lunch Dr. Harold Pressey of Bangor gave a paper on "The Heart in Thyrotoxicosis." He outlined diagnostic points and methods of treatment and the informal discussion following attested to the welcome reception of his paper.

About sixty members and guests were present, many of whom expressed a wish for more joint meetings in the future.

ARTHUR T. WHITNEY,
Secretary.

Hancock County

The June meeting of the Hancock County Medical Society was held at the Belmont Hotel, Bar Harbor, Maine, on Wednesday evening, June 27, 1934.

At 7.45 P. M. a buffet supper was served.

At 9.00 P. M. we re-assembled in the hotel parlor, where the regular meeting was called to order by the president, Dr. George A. Neal, for the transaction of business matters.

Program:—A most interesting and instructive program on Tuberculosis, medically and surgically, was presented jointly by Dr. Paul Wakefield, Supt., Central Maine Sanatorium, Fairfield, Maine, and

Dr. George E. Young, Skowhegan, Maine. Many X-ray pictures were used for illustrating the various cases and their end results.

It is to be regretted that programs of this nature, of so much value to any and all practitioners, could not be well attended.

Eleven physicians and one guest were present.

R. E. WEYMOUTH, M. D.,
Secretary.

The 67th annual convention of the *Maine Pharmaceutical Association* was held June 27-29 at The Belgrade, Belgrade Lakes, Maine. The chief topic of discussion resulted in a vehement opposition to the Cosmetic Law passed by the last legislature.

The *University of Rochester School of Medicine and Dentistry* will hold its fifth annual *Summer Graduate Course in Ophthalmology*, July 30th to August 3rd, Rochester, New York, with a very interesting and instructive program.

The *New York Academy of Medicine* announces its Seventh Annual Graduate Fortnight which will be a postgraduate two weeks course devoted to *Diseases of the Gastrointestinal Tract* beginning October 22nd. The program comprises afternoon clinics, evening meetings and a scientific exhibit.

The thirteenth annual scientific and clinical session of the *American Congress of Physical Therapy* will be held in Philadelphia at the Bellevue Stratford, September 10-13. Physicians and their technicians, properly vouched for, are eligible to attend. Preliminary program may be secured from American Congress of Physical Therapy, 30 North Michigan Ave., Chicago, Ill.

During the week of May 28th the *American Psychiatric Association* held its annual meeting at the Waldorf Astoria. Dr. Bernard Sachs, President of the New York Academy of Medicine, delivered the address of welcome to the members of the Association. The Presidential address delivered by Dr. George H. Kirby on "Modern Psychiatry and Mental Healing" is noteworthy. These speeches may be found on file in the Journal office.

Dr. William H. Walsh, the famous Baltimorian, has departed with a blessed memory at the age of eighty-four. He was ill only in the last years of his life and labored for surgery until the end. Favored much by fortune, Dr. Walsh was nevertheless a "Grand Old Man in Medicine." Born in Connecticut, he moved to Baltimore at middle age and made it a famous center.

Book Review

I Know Just the Thing for That by Dr. J. F. Montague. This is a clever book based on the universal recommendation of something that every sick person or imaginary patient hears from interested friends. The book is dedicated to patients without doctors and doctors without patience. The twenty-four chapters run amusingly from "How Does One Get That Way?", "The Crime Wave in Cathartics," "Name Your Poison," "Blood Pressure vs. Food Pressure," "Troubles We Don't Talk About," and so on. Readers may see that here is plenty of *just the thing*. The book is well printed on good paper.

In closing we urge careful attention to the chapter on "Constipation-Colitis-Cancer," namely, to be careful to adjust the food intake to the decreased activity of advancing years.

J. A. S.

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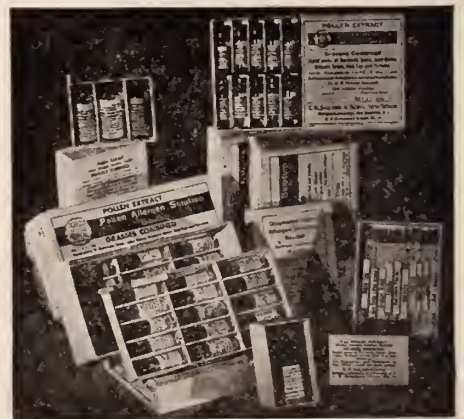
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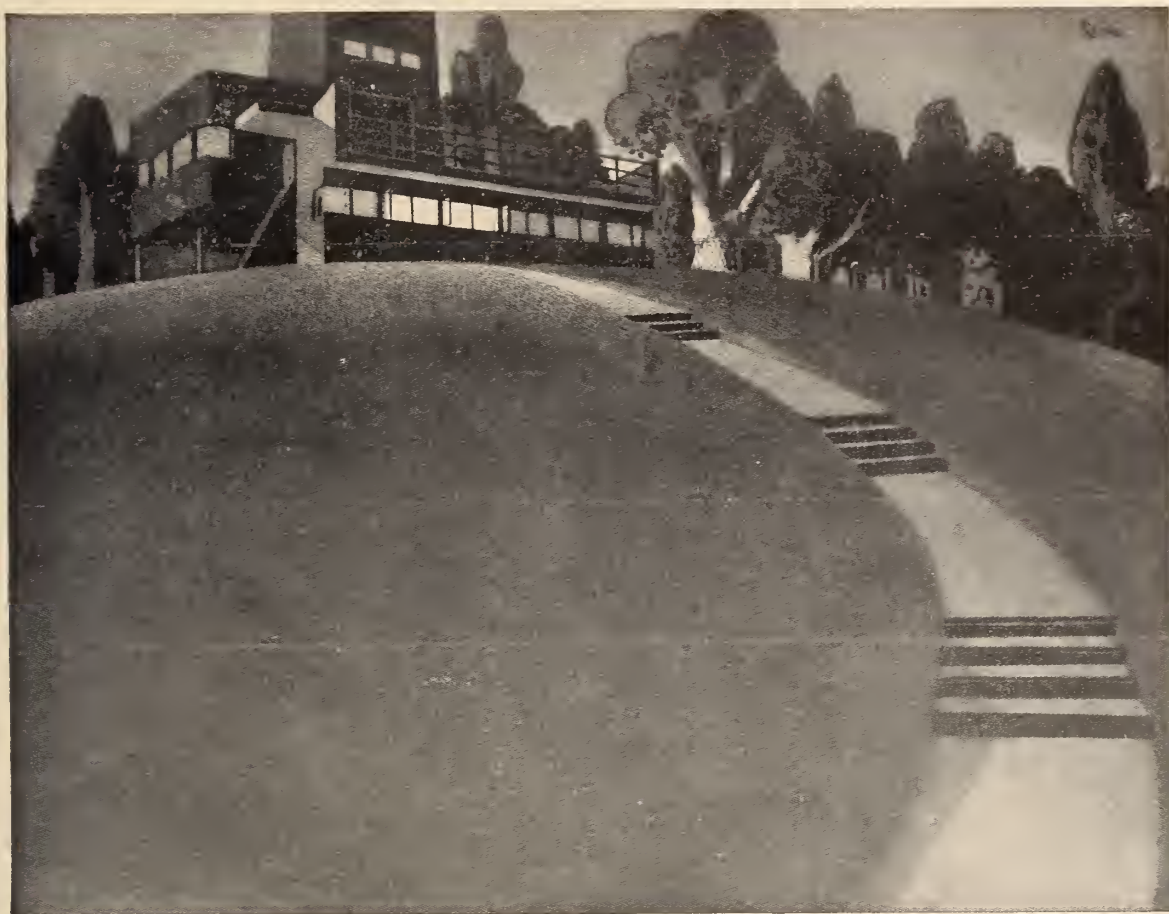
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Editorials

The Clinical Meeting of the Association at Portland on next October 4th and 5th

On October 4th and 5th there will be held in Portland the second clinical meeting of the Maine Medical Association for the year 1934. Spurred on by the excellent session held last February in Bangor, every effort is being made by the local group to make the coming meeting an outstanding success.

Clinical demonstrations are being arranged in the three largest and several of the smaller hospitals, which will cover the various branches of medicine and surgery, a special endeavor being made to make these demonstrations as practical and instructive as possible. President Gehring has suggested that the meeting be clinical in fact as well as in name so there will be no formal papers presented. During the session lunches will be served at the various hospitals and on Thursday evening, October 4th, the Cumberland County Society is planning to have the visiting members as its guests at a dinner in the Hotel Eastland, at which a speaker of national reputation will be heard. Special entertainment is being arranged for the wives of visiting physicians.

It is hoped that a more complete program

can be printed in the next issue of the Journal, but in the meantime please reserve next October 4th and 5th for the meeting in Portland.

J. R. HAMEL,
General Chairman.

Death of Madame Curie

Although the newspaper world has been overcrowded with notices of this famous woman, we venture to lay a little wreath of biography around her fame and value to the world of medicine and surgery. Born in Warsaw, she studied early in life at the Sorbonne and in 1895 married Pierre Curie, a young scientist of great promise. They continued to work together but its direction was suddenly changed by the epoch-making discovery of Becquerel in 1896 who showed that uranium emitted rays which penetrated and blackened a photographic plate and discharged an electrified body.

Mme. Curie showed that the radioactivity was due to another element than mere uranium and continuing her studies she discovered a new substance which she named Polonium, after her native land, and later still another element which she happily named our Radium of today.

Scientific societies rewarded Professor and Madame Curie in 1903 with the Davy medal and in 1904 they shared a Nobel prize with Becquerel. After the death of Curie in 1906 from a street accident in Paris, Madame Curie was rewarded with another Nobel prize in chemistry for the discovery and isolation of the new element Radium. She was appointed to a special Chair in the Sorbonne, being the first woman so honored, and later a special Radium Institute was founded for deeper investigations into radioactivity and Mme. Curie was appointed the first director and held this post at her death. Truly we say a noble life well spent for mankind and science. With these few words we hand her memory a laurel wreath.

James Frederick Hill, M.D.

A birthday celebration was carried out in honor of our well beloved comrade, Dr. J. F. Hill of Waterville, on the occasion of his eightieth birthday, June 15th. Many distinguished guests were present, including our honored and honorable Governor Louis J. Brann, Dr. E. W. Gehring, President of the Maine Medical Association, Mayor L. Eugene Thayer of the City of Waterville and many others.

A silver cocktail set was presented Dr. Hill

by his many friends in the City of Waterville and surrounding towns, and he was feted as a man who, as a citizen and physician, was one of the worthy men in the history of Waterville. He is not only a good medical man but a clever surgeon and well worthy of all the handsome words that could be said of the man who on that occasion was truly the grand old man of Waterville.

The members of the Maine Medical Association do not wish to be forgotten as partakers in the spirit of the fete and even at this late date are offering most kind wishes and many congratulations to one of its famous men of the profession.

The speeches on the occasion were most kind and complimentary and must have touched their recipient with many tender thoughts of his past good works and beneficial life in the community.

Coming Meetings

During the Clinical Session of the Maine Medical Association, October 4th and 5th, at Portland, meetings of the following will be called: Council, Editorial Board, County Secretaries, and the Legislative Committee.

REBEKAH GARDNER,
Secretary.

**Sterility*

By M. F. RIDLON, M. D., Bangor, Maine.

From ancient times, marital unfruitfulness has been considered a great misfortune, and even in these days of so-called depression, we are, at least, occasionally consulted by some patient demanding to know why they do not become pregnant.

To define sterility, as text books define it, we could say this, "sterility implies a condition in which the woman does not conceive, and if she does conceive, she is unable to bear children." Personally, I am inclined to shorten that definition, and only say that sterility implies a condition in which the

woman for some reason does not conceive. I rather believe, if I have a patient that I know is unable to bear children, I am more interested in some form of so-called Birth Control than I am in problems of sterility in its broadest sense.

This paper, therefore, will only deal with a very few of the more common pathological conditions that apparently prevent conception. Before naming or discussing these conditions, it is well to try and find some workable classification of sterility. It is usually classified in this manner:—

* Read before the Maine Medical Association Annual Session, May 28th, 1934.

(1) Primary sterility, a condition in which a woman is living with a fertile man and never becomes pregnant.

(2) Secondary sterility or a one-child sterility when the woman has given birth to one or even more children, then suddenly becomes sterile.

(3) Apparent functional or potential sterility which includes that surprisingly large group of women which because of some prohibiting factor are unable to become pregnant.

So far, I have implied that all cases of sterility arise in the female side of the house. Nothing is further from the truth. Various authors have estimated that from fifteen to forty per cent. of all cases of sterility are caused by the male. Considering this particular point, it would seem that no matter how gross a lesion is found in the woman, the responsibility of the male should not be overlooked. This question can be easily decided by the general practitioner, remembering in particular that man in order to impregnate his partner must do more than to perform the sexual act. His particular work, so far as this is concerned, is to deposit healthy live spermatozoa into the cervical canal or in the region near the cervix. We can dismiss the subject of male sterility in a brief manner. If a post-coital examination within an hour or two is made of the woman and an ordinary microscopic examination made of the secretions found in the vagina, and active spermatozoa are found in this smear, we can consider the man free from blame. If this condition is not found, and the male shows no evidence of gross pathology, he should be referred to some competent genito-urinary specialist for study.

In a paper of this length, it is absolutely impossible to touch on all the very many phases of sterility, or even of all the causes of this condition. Therefore, I choose to only enumerate a few of the relatively simple causes, and cite a few personal cases that it has been my lot to work with.

First, conditions causing sterility because of some lesions interfering with a normal sexual contact. Here we must consider dyspareunia as a definite cause, intact hymen, although I did see a case of pregnancy and

delivered the patient with a so-called intact hymen, certain unusual cases of double vagina, double uterus, etc.

Quite an interesting example of such a condition is the following: Mrs. A came to my office the early part of this year. Her complaint was sterility. She was thirty-five years of age, married fourteen years, no pregnancies. Past history showed nothing of note. She had had the usual childhood diseases, but no serious illness or operation. Menstrual history: onset at eleven, regular every twenty-eight days, flow six days, some pain. Physical examination showed a thin, poorly nourished, and extremely nervous female. General physical examination was negative. On pelvic examination, found that it was impossible to examine the patient because of the severe vaginismus. On closer questioning, found that this individual had never experienced normal sexual intercourse. After questioning with considerable tact, found that she always realized that there was "something wrong," and only her desire for children brought her to a doctor to find out just what the trouble was. She was advised operation, and this was carried out. On examination under the anæsthetic, found an intact hymen about five mm. in thickness. This was excised, then the vagina was found to be considerably stenosed. The cervix was in the axis of the vagina and did show considerable evidence of inflammation, no doubt due to the very poor drainage. The uterus was in good position and no lateral pathology could be made out. The cervical canal was dilated and the uterus curetted, considerable curettings being obtained of quite thickened endometrium. The stenosed vagina was enlarged by a bilateral sub-mucous division of the constricting fibers. She made an uneventful recovery. After considerable persuasion, she was made to realize that things were quite normal, and within two months she became pregnant. Of course, this sort of case is very unusual, but I think quite interesting.

Uterine displacements may also cause sterility, particularly the retro-displacements. Here, the cervix may be thrown so far forward that the spermatozoa will not enter the canal. Likewise, a very sharp antiflexion of the cervix may show it so far forward that the same condition is obtained. A prolapsed

uterus may so interfere with coitus that impregnation is impossible.

Mrs. B, referred to me in 1931 because of sterility, was a most intelligent and co-operative woman, thirty-nine years of age, married twenty-one years, financially able, and both she and her husband very desirous of children. No contraceptive measures had ever been used. Past history of both she and her husband was entirely negative. Menstrual history: onset at fourteen, regular every twenty-five days, flow eight days, some backache during period, and also at times for from three to four days before period. Physical examination showed a very healthy and robust looking woman. General physical examination was entirely negative. Pelvic examination showed normal introitus, cervix anterior, and fundus found retroverted, no lateral pathology made out. The uterus was easily put in position and a Smith-Hodge pessary inserted. Due to the relatively long periods and somewhat shortened intermenstrual time, it made me wonder if the patient had not had the retroversion for a long period of time. She returned in one month, had had a normal period of six days' duration and no backache. The pessary was removed, cleaned, and reinserted, and in another month she came back with the story that she had gone over her period, and went on to a full term pregnancy, and was delivered by Cæsarean section with no complications. This particular case is cited because of the very simple abnormality which had undoubtedly rendered this patient sterile for the past twenty-one years. Of course, we do see many cases of retroversion in patients who readily do become pregnant, but in this case, the cervix was pushed so far forward that the spermatozoa could not enter the canal.

Endocervicitis or an endometritis is also a common cause of sterility. A cervix markedly inflamed, oftentimes pouring out its acid secretions, can readily be a cause of sterility. Spermatozoa function most readily in a slightly alkaline medium, and in most cases of endocervicitis, the secretions are quite acid, which has a decidedly inhibitory effect on the sperm. This discharge itself may be so tenacious that it acts in a mechanical way against the passage of the sperm up

the canal. We see mentioned frequently in literature the subject of "pinhole-os" as being a distinct barrier to impregnation. To me, this seems doubtful for we are already dealing with a microscopic cell. If the canal is free of mucous and there is no obstructing lesions, then the sperm will be able to make progress through the canal even if it is reduced in size. Hyperplastic endometritis is also a cause of sterility, since the endometrium is so thickened that it becomes apparent that the fertilized ovum cannot find a proper place for implantation and growth.

Mrs. C was seen in August, 1933, a teacher, twenty-five years of age, married three years, very desirous of children, for past year no contraceptive measures used. Her only complaint was of some discharge, quite thick and at times irritating, also a slight backache. Past history: appendicitis seven years ago, otherwise negative. Menstrual history: onset at fourteen, regular every twenty-four to twenty-five days, flow four to five days, for past two years has been flowing more profusely in periods that last from seven to eight days. Physical examination in general negative. Pelvic examination showed normal introitus, cervix in axis of vagina and markedly eroded, sticky gray discharge from the cervix, acid to litmus paper, uterus was in normal position, and freely movable, no lateral pathology. In this case, past history of the husband showed that five years before marriage he had the mumps with some involvement of the testicles. So first a post-coital test was done for examinations of the secretions for sperm. Live and active spermatozoa were found. The cervix was cauterized and the uterus curetted. A large amount of enrettings of thickened endometrium were found. The patient was given an alkaline douche and sent home. In a month's time, the cervix was healed very well. The discharge was practically gone and the vaginal secretions alkaline in character. Her next period was of only five days' duration and normal in amount of flow. The next period was missed and the patient is now about eight months pregnant.

Endocrine disturbances have been much written about during the past few months as a cause of sterility. This is very complicated

and difficult to understand but believe it shows considerable promise. Briefly, may I cite one case?

Mrs. D, referred to me in November, 1933, was thirty years old, one child five years old, no pregnancies since, no complaint except that she has gained forty pounds during the past two years. Past history negative. Rapid recovery following birth of baby and no complications. Menstrual history: onset at thirteen, regular every twenty-eight days, last two years reduced in duration of flow from five days to one to two days. Physical examination showed rather obese female. General examination was negative, also pelvic examination. Husband's past history was negative. He showed active spermatozoa. This patient's basal metabolic rate was minus twenty-one. This condition was undoubtedly due to a pituitary and thyroid disturbance. She was put on thyroid extract, and has now lost about twenty-five pounds, and has just recently gone over her period and also shows some other signs of pregnancy.

Briefly, what is the treatment of sterility? In the first place, the history of both parties is extremely important. This includes both

family and individual histories. The history of fertility in the family, the history of childhood diseases, particularly mumps, is very important, and probably most of all, a very complete marital history, then the examination, of course a complete physical, including the pelvic. Then if nothing is found, the special tests, such as the post-coital test, collecting the semen from the region of the cervix and in the cervical canal and examining for active spermatozoa. If these are found, and the condition warrants, a so-called Rubin test should be done. This is the insufflation of the tubes by gas. If negative, the tubes can be injected with lipiodal to determine the point of closure. Following this, a complete study of the endocrine system should be carried out.

This paper has only touched on a few of the simplest causes of sterility, such as anatomical defects, uterine displacements, endocrine disturbances, there are many more. The cases reported here have been successful but there are many failures. But one case of sterility treated successfully brings a great deal of happiness to the affected parties.

**Acute Head Injuries*

By H. EUGENE MACDONALD, M. D., Portland, Maine.

This paper is but a brief glimpse at some of the features of acute head injuries. It is not in any sense an exhaustive thesis of the subject.

Let us consider these people as we meet them: in the hospital emergency ward, on the street at the site of accident, or in the home with an excited family standing about.

For simplicity we shall divide our hypothetical cases into two groups,

1. Those who have never been unconscious.
2. Those who are unconscious.

1. In the first group there is injury to the head somewhere and it may be from slight to moderate in its severity. It usually is contusion, abrasion or laceration. These people do not feel particularly sick and often scorn

treatment or examination. The immediate need here is treatment of the superficial wound or wounds followed by a neurological examination seeking any reflex variations or any evidence of confusion. These individuals should not be dismissed without this checkup and if possible they should be kept under close observation for several days. The reason for this observation is that sometimes these persons are oozing blood within the brain and do not show evidence of this leakage for some time, even as long as several days.

During the period of observation these patients should be repeatedly re-examined to find any neurological changes. No patient is too frequently examined neurologically because often there are changes from hour to hour.

To illustrate the above type of case let me

* Read December 8th, 1933, before the Androscoggin Medical Association.

refer to a recent occurrence. A child of about five years of age was playing in the street when a passing automobile struck him down. He was not unconscious tho sustained a scalp laceration showing brisk hemorrhage. He was taken to the hospital where an X-ray showed a linear fracture running into the base of the skull. There was no evidence of depression. The scalp wound was treated and a lumbar puncture showed a slightly bloody spinal fluid which was not under pressure. This child was put to bed under constant observation and showed no ill effects of his injury until eighteen hours after the accident, when there began to be a weakness of his left hand and forearm. Within an hour while preparations were being made for operation, the whole upper extremity became paralyzed. This child was opened and a subdural clot removed and a bleeding cortical vessel tied off.

It is not at all improbable to suppose that this onset of weakness would have been less soon discovered if this child had been at home. It is likewise very probable that the paralysis would have been greater before the child could have been taken to the hospital and operated upon.

This serves merely to illustrate the purpose and value of continued observation in these cases.

2. In the second group we are dealing with acutely sick patients.

Let us further subdivide these unconscious peoples into three classes.

A. Those unconscious briefly at the time of the accident, say a few seconds to an hour.

B. Those not unconscious at the time of the injury but who have become so within a few hours afterward.

C. Those who were rendered unconscious at the time of the mishap and are still unconscious.

2A. In this first subclass we find those patients who have received a "knock out" blow and have been rendered unconscious temporarily. This is concussion in varying degree from mild to moderate in severity but not prolonged. There is likewise edema of the brain in these individuals. These patients generally recover soon and feel better but complain somewhat of a headache and occasionally of dizziness. This is the result of the

edema and slight bleeding and overproduction of cerebrospinal fluid. These people should be put to bed for a week and two weeks is even better. The same need for repeated examinations holds here. There is seldom need for surgical intervention. These patients may or may not show a linear fracture of the skull by X-ray.

2B. In the second subclass the patient has had direct violence to the skull but he has kept on with what he was doing at the time of the injury. Then a few hours afterward he slipped into unconsciousness. This is the typical "base ball" story. The batter is struck in the temporal region by a pitched ball. It does not injure him apparently and he is passed to the base. He plays the remainder of the game and goes home. He may eat little or no supper. Sometimes these people vomit before their coma, often they do not. Usually they feel drowsy after supper and go to bed early and seem to sleep deeply and soundly. The family often mistake this insidious onset of coma for deep, natural sleep and the discovery is not made until much later that it is coma.

These patients generally show little or no external injury. Most of these are extradural hemorrhage from the middle meningeal artery. Neurological signs usually indicate the site of the bleeding. The treatment for this patient is immediate craniotomy with evacuation of the accumulated blood clot and stoppage of the bleeding point. A subtemporal exposure is adequate in most instances though one should be prepared to turn an osteoplastic flap. If the hemorrhage is not located at the site of the first approach, the opposite side should be opened at once because these people are acute and will not stand much more pressure. At this stage further increase of intracranial pressure is not compatible with life.

2C. In the third subclass are patients who are very sick and in definite shock which may vary from moderate to severe. In these people the immediate need is not surgery but treatment of the shock. When they rally it is time enough to enact the surgical procedures. Supportive measures are the things most necessary to life at this time. These people show the usual very low blood pressure, feeble

rapid pulse and rapid shallow respirations, tho sometimes the breathing is stertorous. These are the people who have diffuse hemorrhage over the cortex and into the brain substance and many have brain laceration.

Now that we have an idea of the appearance of our patients, let us consider some of the other features to be borne in mind throughout the consideration of this whole group of sick people.

There is no sense in hustling a patient about for an X-ray when that person is in definite shock. X-ray pictures are splendid aids and valuable parts of the records but they can be overemphasized to the patient's disadvantage in these instances. Furthermore, most depressed fractures of the skull should be diagnosed with finger tips.

Intravenous glucose is very beneficial as a supportive measure in percentages of 5-10-25-50. The hypertonic solutions of 25-50% should be used in cases where there is increased intracranial pressure and edema of the brain.

Limited fluid intake is often recommended on the less severe cases, 1000 cubic centimeters of fluid in twenty-four hours is sufficient limitation for an adult. This limitation should not be maintained for more than a week, however, because by the end of that time they need the fluid and the same result can be obtained by repeated lumbar punctures and an unlimited fluid intake.

Lumbar puncture is a procedure which seems beyond question to be of definite value in all cases. It is a splendid diagnostic aid and a procedure of therapeutic worth. It should not be considered sufficient merely to insert a needle and withdraw fluid and estimate the pressure by the rate of the flow of the fluid. All punctures should be done with manometers attached and careful pressure readings taken and charted. Every specimen of fluid removed should be examined microscopically to determine the character and number of blood corpuscles present. These things should be charted in order that a comparative graphic record is available. The pressure readings serve as a guide for the removal of the fluid in all cases of increased intracranial pressure. The corpuscle count tells when the bleeding is progressing and diminishing and the character of the blood

elements tell whether bleeding is new or old. The puncture and removal of fluid is a means of relieving headache and a method of decompression when other procedures are too severe. In cases where headache is the only complaint, the lumbar puncture is most satisfactory as a method of control.

Surgery is indicated only in those cases where there is increased or increasing pressure within the skull. Likewise the indication for surgery is only in those cases where the elevated pressure cannot be relieved by other means, such as lumbar puncture or hypertonic solutions. Naturally, any depressed areas involving both tables of bone in the skull should be elevated, but not when the operation is going to subject the patient to increased shock. Of course each case is governed by the actual condition of the patient, but it is a safe generalization to say that surgery is contraindicated when it will increase the patient's shock to a danger point. This must be particularly borne in mind when the area of depression is over the motor cortex. In cases where operative procedures are inaugurated, the first requisite is adequate exposure. A subtemporal decompression should be at least the size of a silver dollar and low enough on the temporal lobe to be a benefit.

Smaller openings in the skull do not increase the size of the bony box in appreciable amounts and are more harmful than good because the patient has had surgical trauma without coincident benefit.

In cases where there is bleeding from the ears or nose or leakage of cerebrospinal fluid from these orifices, the best method is to allow free drainage and to keep the parts as nearly sterile as possible. The great danger here is infection by direct continuity. Sterile dry wipes are very satisfactory in these places.

For those individuals who are restless and thrashing about, paraldehyde by rectum or intravenous sodium luminal produce the desired results. Morphine should be avoided because of its depressive action so often masking signs which would otherwise be observed and of value.

Caffeine and adrenalin are as good drugs as can be found for rapid bolstering of failing circulation. Coramine "Ciba" has been

tried but is no better than the aforementioned combination.

If possible a chart of periodic blood pressures, pulses and respiration rates should be kept. The usual interval between these chartings is fifteen minutes. The result of this tabulation is a graph showing the course of the patient as observed at short intervals. Many times the information obtained from such a chart serves as a deciding factor in any early operation when other clinical signs are less marked. A rising systolic blood pressure with a falling pulse and respiration rate is pathognomonic of increasing intracranial pressure.

In individuals with very bloody spinal fluid an elevated temperature is usual because of the free blood in the basal system and a brain laceration causes a temperature rise.

All skull injury cases should be kept warm at all times. If the temperature rises, do not resort to drastic means to reduce the fever,

that is, by alcohol or ice baths. Rather increase the fluid intake as the temperature rises.

Other things must not be laid aside in these cases. Urine should be examined and the output measured when possible. The blood non protein nitrogen and sugar should be taken to be sure that prolonged unconsciousness is not due to uremia or diabetic coma.

Occasionally you will meet a patient who is unconscious and breathing stertorously yet is without any evidence of increased intracranial pressure. Usually these people are getting an inadequate amount of air due to plugged noses or adenoids or such coupled with the conditions of the tongue falling back into the mouth. The improvement is marked and instantaneous if the jaws are opened and the tongue drawn forward.

These are some of the immediate measures which have proved useful in acute head injuries.

Discussion of Dr. H. Eugene Macdonald's Paper on Acute Head Injuries

By DR. A. MYERSON.

I am impressed quite favorably by Dr. Macdonald's very practical and pertinent paper. Among the other good things which he has said, there stands out, in my mind, the emphasis laid upon the chart. For years it has been my impression that one gains very important or rather invaluable information from such a chart. Thus, if a patient comes in and his chart shows no particular changes in pulse, no especial rise in temperature, no alteration in blood pressure, and a normal respiratory rhythm, the chances for that patient are exceedingly good, unless there is a delay in bleeding which should be watched for in each case. A chart which shows shortly after entrance a rapid heart, a rise in temperature, with rapid breathing and a low blood pressure, is a chart indicating intracranial hemorrhage with diffuse brain injury, and the case has a grave prognosis. A slowing-up of the pulse with a gradual rise in

blood pressure, with the deepening of unconsciousness, is strongly indicative of increased intracranial pressure and should stimulate the surgeon to such measures as lower intracranial pressure, and especially keep him alive to the necessity of craniotomy.

When repeated lumbar punctures are done, they should, it seems to me, be charted as to the amount of pressure, red cells, white cells, total protein, total sugar; increasing spinal fluid pressure would thus stand out as clearly as a rise in temperature. The number of white cells, if associated with a decrease of sugar, would show infection. The extent of a hemorrhage, if it has entered into the subarachnoid spaces, is easily followed by a red count.

It is not my intention to discuss Dr. Macdonald's paper in any detail, but I think emphasis on the chart and its relevant meanings is of clinical importance.

My First Adventure with Twins.

A Case Report: Somewhat Delayed.

"There's a man in the office wants the doctor right away."

"All right," I said, "I'll be there in a minute after I drink a cup of coffee."

I had just sat down to breakfast, and had not begun my cereal. I found a young fellow waiting in my doorway. "Are you the doc?" "Yes," I answered. "Well. My woman is sendin' out, ben at it all night. There's no one there with her but Granny Toothaker. She's well enough for common cases, but this is our first baby, and though she said we didn't need no doctor, Sue insists she wants the old man. But he's off on another case, and I guess you'll have to do."

I got my obstetrical bag, jumped into his buggy, and we drove up the river road two or three miles at a 2.40 gait. We came to a small story and a half farmhouse by the side of the road, and in the doorway stood an old woman, waiving her apron. As we drove up she called out. "Hurry up, George, she's a comin'." I vaulted over the buggy wheel and rushed into the house. Turning to the left I found I was in the kitchen, where sat two old women, one of whom was knitting busily. On the side of the kitchen was the doorway of a small bedroom in which was evidently the patient, who was screaming, "Where's that doc. I can't hold in much longer."

I looked in and saw a young woman, sitting up in bed and pulling hard on a sheet the end of which was tied to one of the bedposts. An old woman was rubbing the screaming patient's back, at the same time encouraging her with "Bar down, Sue, you're doin' beautiful." The proper thing to do at this stage of the game was for the doctor to pull off his coat and roll up his sleeves. But there was no time to do even this. I thrust my hand under the bed clothes, and found the baby's head already born, and with two or three pains the rest of the body followed. The woman then fell over onto her side and quietly rested.

Now I had time to straighten up, take off my coat, and wipe my hand with some rags which the woman gave me. I then performed with, I hope, impressive dignity, the difficult

surgical operation of applying a ligature to the umbilical cord with a piece from grandma's ball of blue woolen yarn, severing it with the family shears, and handing the child over to the nearest old woman who with trembling hands received it in her apron. I learned afterwards she reported, "Thar he sot jest as ca'm as if he'd ben fixin' belly-buttons all his life, an' I dunno as if I ever seen the job dun slicker." But to my surprise and apprehension the patient began to hold her breath and pull again upon the sheet. What was going to happen? It wasn't usual for labor to commence again to deliver the after-birth, and it was not proper to expose the part of the body in action to discover what was the trouble.

Without hesitating a moment I lifted up the bedclothes, and saw to my horror the leg of another child before me. What was I to do in such an emergency? What complication did my books say I might expect in such a condition? I must rely upon myself alone, I couldn't hope for professional advice from some other doctor, for there was no such help nearer than the village, and more important than all there was no time to send for it. But while I stood subconsciously expecting the worst and girding myself up for battle, there before my waiting eyes, "Nature took its course." While I pulled cautiously upon the slippery leg, so provokingly offering itself, the breech slid slowly into view, then the trunk, until the head and arms, after a tremendous strain, popped out like the cork from a champagne bottle.

And I had delivered successfully my first twins.

My professional duties completed, I had an opportunity to look into the kitchen and see how things were going on there. The old woman who had received the first child was holding it in her lap beside the stove. It was as naked as when it was born, and was being fed something with a spoon from a cup, which she was giving it. The fluid was evidently not very acceptable, for as fast as it was given, the baby vomited it just as quickly.

"What are you giving the baby, Grand-

ma?" I asked. "Waal, it's a little somethin' we always gin 'em to make 'em puke, and then they don't have sore mouth when they get to nussin'." "It must be something pretty good to do that. What is it?"

"It ain't no secret. I've gin it more'n sixty year. If you must know, it's half 'n' half, chamber-lye and melted butter!"

But we do things different nowadays.

S. P. W.

Abstracts

"The Use of Ergotamine Tartrate in Migraine"

By WILLIAM G. LENNOX, M. D.

N. E. J. Med., Vol. 210, p. 1061.

May 17, 1934

Ergotamine tartrate has been in use abroad in the treatment of migraine since 1928. This author reports a series of 45 patients treated with the drug while suffering from an attack. Abrupt termination occurred in 40, 3 had no relief, and 2 observed shortening of the attacks. The best effect was obtained by giving 0.25 mg. intravenously, and at the same time the same amount subcutaneously. Doses of 1.0 mg. by mouth are less effective. In the majority of cases nausea or vomiting or both occurred before the headache began to lessen. Other side-effects observed were dyspnea, a sense of constriction in the chest, and an elevation of both systolic and diastolic blood pressure. It is absolutely contraindicated in pregnancy. It is not recommended for patients mildly affected who obtain relief from sedatives. The mode of action of the drug is unknown.

R. S. H.

"Experimental Studies in Gastric Physiology in Man"

(A Study of Pyloric Control)

By HARRY SHAY, M.D. and J. GERSHON-COHEN, M.D.

Surg. Gynec. and Obstetrics, June, 1934

These authors have indicated to what extent the role of the pylorus has engaged the attention of medical thought even before the dawn of experimental physiology and shown that this interest has been maintained by reason of the several names ("doorkeeper," "portanarium," "rector" or "ruler," etc.) successively applied to this muscular strip. The riddle of its control has not been completely solved.

Their experiments, carried out from the gastrointestinal clinic of various hospitals have consisted of a roentgenological study of gastric emptying and pyloric behavior in human subjects following the gastric and duodenal application of various test substances, and while many reagents were studied, this report is primarily concerned with the action of acid and alkali in 176 serial roentgen examinations. The results indicate not a new concept, but rather a revision of one of the oldest, since they

establish the pylorus as a door, but emphatically not autonomous in its action.

Of the three components concerned in gastric emptying, gastric peristalsis plays an incidental role only, and is not concerned with pyloric opening; gastric tonus is the greater motivating force, but the potency of each depends entirely upon the state of the pylorus. When the stomach is empty, the normal state of the pylorus is that of relaxation. This is always seen in achlorhydrics, but does not obtain in patients with free gastric acid. The hydrochloric acid of the gastric contents is the natural intrinsic agent responsible for pyloric action, although it is not the sole possible agent, since certain other ingested substances (irritants, fats, hypertonic or hypotonic solutions of sugars and neutral salts through their physicochemical action are equally efficacious).

Any agent becomes effective in producing pyloric closure only upon reaching the duodenum. Here a reflex is activated and maintained until proper neutralization or dilution of the duodenal contents, which is to make it acceptable to the adjacent distal duodenum, has occurred. Then pyloric relaxation follows. The duodenal mucosa adjacent to the cap is most responsive to stimulation, though the response may be obtained in other portions as well. In general the farther from the cap, the stronger the stimulus necessary to evoke pyloric response. Under normal conditions, the duodenopyloric reflex is not dependent upon duodenal filling.

Evidence is presented suggesting that the duodenal neutralizing mechanism is most highly developed in hyperchlorhydrics and least in achlorhydrics. The antrum, pylorus and duodenal cap appear physiologically to be intimately related. The authors describe their concept of pyloric action by a simile with the stomach like dumb waiter ever ready to deliver through its door, the pylorus, anything reaching it. The duodenum, however, like a sensitive connoisseur is selective, and only if the gastric contents are acceptable to the official taster, the duodenal cap, does gastric emptying go on uninterruptedly; if not, the door, or pylorus, is hurriedly closed and stays so until the portion tasted ("trial portion") is rendered acceptable. Thus, the pylorus is a door, decidedly not autonomous in action.

D. H. D.

"Convalescent Scarlet Fever Serum and Commercial Antitoxin"

(A comparison of their protective values.)

PAUL S. RHOADS, M.D., and BENJAMIN M. GASUL, M.D.
Journal A. M. A., June 16, 1934, Vol. 102, No. 24.

Cases have been observed in which the usual dose of scarlet fever convalescent serum administered to susceptible individuals failed to afford passive protection against scarlet fever. Commercial antitoxin has always yielded complete passive protection if given before the onset of the disease.

In titration of the serum against the antitoxin it was found that the average of pooled serum contained 500 neutralizing units per cubic centimeter. The commercial antitoxins are required to have a potency of not less than 15,000 neutralizing units per cubic centimeter. From the above it is seen that it requires thirty times as much of the serum to give a unit dose as of the toxin.

Twenty persons known to be susceptible to scarlet fever were given 10-20 cubic centimeters of pooled serum. A large portion of these had not become Dick negative several days later. One whose test remained unchanged three days after administration of the serum at once became immune after a prophylactic dose of commercial scarlet fever antitoxin was administered.

The conclusion drawn by these authors is that commercial scarlet fever antitoxin is far superior to convalescent serum.

J. G.

"Duration of Immunity Following Vaccination Against Small Pox"

W. PALMER DEERING, M.D., and M. J. ROSENAU, M.D.
Journal A. M. A., June 16, 1934, Vol. 102, No. 24.

There is still a traditional belief that the duration of the protective effects of vaccination is about seven years. If the vaccination does not take on an individual it does not necessarily mean that the individual is immune. In instances where there has been no take it has been found that the individual was not truly vaccinated or that the vaccine had lost its potency.

In the light of recent investigations the reactions are classed as immediate, accelerated or primary. The immediate is a rapid reaction and indicates a high degree of immunity. The accelerated is somewhat slower but shows some degree of immunity. The primary reaction is characteristic of the person without immunity and runs a twelve-day course, leaving the usual scar.

Out of a group of medical students studied it was found that only 1% of the group gave a primary reaction. These were students that had been vaccinated as long as 20 years previously. This means that 99% of the 400 cases studied were still immune to a certain degree.

The revaccination of an individual insures protection but in most cases only gives the immediate reaction.

J. G.

"Lingual Thyroid Gland"

Perlman.

Archives of Otolaryngology, May, 1934.

Three cases of lingual thyroid have been seen during the last four years at the clinics of the University of Chicago. These may be discovered accidentally, giving few, if any, symptoms, and requiring no treatment. On the other hand some of these may show pharyngeal obstruction and require operation. Care must be taken not to produce myxedema by complete removal in the absence of other demonstrable thyroid tissue.

F. T. H.

"Extracapsular Cataract Extraction Combined with Posterior Capsulotomy"

By D. T. ATKINSON, M. D. *American Journal of Ophthalmology*, Series 3, Vol. 17, No. 6,
Page 552, June, 1934.

The writer describes a method of capsulotomy of the posterior capsule at the time of extraction of the lens. This is done with a broad cataract knife immediately after removal of the lens and toilet of the anterior chamber and wound.

He reports repeated success and complete absence of secondary cataract following operation. He emphasizes the simplicity of the procedure and the ease with which it is accomplished, together with the almost unfailing favorable results with which it is followed. He feels that it is a safer and more successful procedure than any type of intracapsular extraction.

H. F. H.

Books Received

Untrodden Fields of Anthropology by Dr. Jacobus X; American Anthropological Society, 70 Fifth Avenue, N. Y.; 786 pages; \$5.00.

The Basis of Passional Psychology. A Study of the Laws of Love in Man and the lower Animals, by Dr. Jacobus X; American Anthropological Society, 70 Fifth Avenue, N. Y.; 396 pages.



The President's Page

Medical Peonage is the title of an editorial in a recent issue of *The Christian Science Monitor* from which are taken the following quotations as they appeared in the July, 1934 issue of *Current Medical Digest*. The subject considered herein is of such transcendent importance to every physician that I ask you to ponder it carefully, bearing in mind that our basic difficulty lies with our General Economic System which, to quote Pottenger, "is still in the stage of plagues and miasmas." Naturally, medical economics is intertwined with it. Some attempt is being made to force medicine to adjust itself to an admittedly unadjusted and wholly unsatisfactory general economic system. In the absence of statesmen comparable to our great medical leaders, it is proposed to foist politically controlled "State Medicine" upon the people, with a view, presumably, to correcting their economic ills by maltreating their physical ills. Why allow advances in science and technology to wreck the stability of industry to the extent that 14,000,000 are unemployed, and, as a consequence, are sick mentally and physically, and then penalize the profession of medicine to offset this evil by regimenting its members under a politician.

If 62% of the people, as the Milbank Fund spokesman alleges, receive "no medical, dental or eye care of any kind." that is their own fault. Doctors are not Shylocks and God knows, as do all the Foundations, that free clinics and dispensaries are in operation throughout the land.

Medical problems can be solved only by the medical profession. The intervention of any third person will degrade our calling to a mere trade and woe be unto the patient.

This talk about "State Medicine" is arrant, blatant, platitudinous nonsense. Nevertheless, the propaganda is persistent and insidious and requires a united profession to defeat it.

"If reformers are as much concerned with genuine benefits to society as they profess to be, might it not be better for them to leave this whole job of adequate medical care for the public right where it belongs—*with the medical profession?*"

"The family physician who brought kindness, ready sympathy and unselfish service in large quantities along with his pills and potions has been passing from the American scene; more and more his place has been taken by a complex mechanism, a highly departmentalized professionalism, with impersonal efficiency its dominating sentiment. Now there is a tentative plan for a broad organization of 'State Medicine,' as recently outlined by the secretary of the Milbank Memorial Fund of New York. This plan, utterly impersonal, purposes that the American population—including that 62 per cent which the fund's spokesman says receives no medical, dental or eye care of any kind—shall be coerced into supporting financially and yielding physically to the domination of a group of State-employed men.

"It is difficult to understand why every citizen—including those who by choice would adhere to a rival school, to no school, or who depend upon prayer for healing—should be compelled to comply with such a regulation. Incidentally, it is strangely foreign to the legend of the family doctor, who worked under the motto, 'To each according to his need; from each according to his means.'

"Yet it is just this point which the Milbank Fund stresses as its reason for proposing compulsory State Medicine. The complexities of modern medical practice, it is claimed, have elevated its cost above the means of many who wish it. Therefore, what could be simpler than for everyone to contribute his proportionate share of the total cost of medical aid, thus minimizing the per capita cost according to the well-known practice of insurance?"

"If those who feel they wish material aid in their illness were left free to enter or refrain from participation in such a scheme, no criticism could be leveled at it. But, in order to make the plan thoroughly effective, says the fund's secretary, it must be made compulsory upon all. But will that 62 per cent of the people who have not felt the need of medicine sufficiently to seek its aid, although it is offered without cost in countless hospitals and clinics, permit themselves to be saddled with medical peonage?"

E. W. GEHRING.

Necrology



Dr. Wallace Nathaniel Price, Gardiner, 1871-1934

On June 16, Dr. Wallace N. Price, well-known physician and former mayor of the city, died at his home in Gardiner, Maine, after an illness of several months. He was 62 years of age and had followed his profession faithfully and with much success for nearly forty years.

Dr. Price was born October 29, 1871, the son of Charles W. Price, who served in both the U. S. Army and Navy during the Civil War, later becoming a prominent surgeon, and Albina (Colbath) Price. His parents were living at this time in Calais, Maine, later moving to Richmond, where he attended the public schools, then the Bowdoin Medical School, where he graduated in 1894.

He at once opened an office at Richmond, where he remained until 1921. In 1893 he was married to Miss Mary B. Moores of East Pittston, Maine, who survives him. Dr. Price was elected in 1913 to the Maine Legislature as representative of his district, and in 1917 was advanced to the Senate. He was a life-

long Democrat. During the World War he was a member of the 20th district Medical Advisory Board.

After his long practice in Richmond he spent a year's vacation in Wisconsin and then came to Gardiner, where he again took up his profession. In 1927 he was elected Mayor of the city, and served two terms in this capacity. Dr. Price was prominent in Masonic Circles, having held many high offices; a member of the Gardiner Lodge of Elks, Past Chancellor of the Knights of Pythias, and a former president of the Gardiner Rotary Club.

He was a member of the Kennebec County Medical Association and the American Medical Association. His loss is mourned by his many friends and the patients who knew so well his skill, kindness and the great sympathy which prompted him to work beyond his strength, and so hastened the illness which caused his untimely death.

A. F. W.

Ralph William Bicknell Winthrop, 1886-1934

Dr. Bicknell, the highly prized son of James William and Lillian Mae Bicknell, was born in Canton, October 18, 1886, and after a busy and eventful life he died at Winthrop, June 7, 1934. He was educated at Canton High School, later at Westbrook Seminary and from there he went through Tufts University and the medical school connected. His medical degree from Tufts is dated 1911. Determined to obtain a solid foundation for his promised life work, he took post graduate courses at the Roosevelt Hospital in New York, Boston City Hospital, and the Maine Eye and Ear Infirmary in Portland. He then settled for practice in Canton, Maine, for twelve years and in 1921 was appointed to the staff of the Winthrop Hospital and practiced in that town for the rest of his life and with much success. He was devoted to medicine, wrote some excellent papers and leaves a fine reputation as an eager student of the healing art.

J. A. S.

Wildy J. Ladouceur Lewiston, 1887-1934

On the 25th of June, 1934, our comrade in medicine departed from our ranks after a long illness, leaving a kindly remembrance amongst the provincial people of Lewiston.

His parents were Joseph Ladouceur and Emma Lavigne and he was born in Isle Bizard, Canada, February 14, 1887, well educated at St. Therese in Canada and completed his education at Montreal University. After serving as interne at St. Mary's Hospital in Quebec, he established his excellent practice in Lewiston. He moved to Augusta and practiced there from 1913 to 1916 but returned to Lewiston where he was at the time of his death. He had an excellent reputation but failing health carried him away suddenly at the end, at the age of 47. He is survived by a widow who was Miss Bella Verville, of Lewiston, a lady of French descent, like himself. He leaves a widow, two sons and a daughter.

J. A. S.

Joseph Warren Sanborn, Waldoboro, 1868-1934

One of our old stand-bys on country consultations, Dr. Sanborn of Waldoboro, a veteran in practice and almost a fifty-year veteran, died at his home, March 5, 1934. He did not look his age the last time that we met. His father was Reuben Sanborn of Waldoboro and his mother's name was Ann M. Carter. Dr. Sanborn was born in Etua, Maine, on January 28, 1868. He was educated in the common schools and Central Maine Institute, then graduated from the Maine Medical School in the class of 1894. Later on he took a course or more of Post Graduate medical study in New York and was an accomplished diagnostician and practitioner, capable for all of the emergencies of a wide-spread country practice such as he carried on for the rest of his life. He was a good talker and a charming companion, always interested in the goings-on of medical Maine and always wanting to know not only how the Portland doctors were going on but he liked to have news from every part of Maine, where he knew the doctors' names by

heart. He settled in Waldoboro in 1894, and he had practiced there until he died, mostly without any vacations. His charming companion and wife, who was Miss Mabel Clark, the daughter of Mr. E. O. Clark and Carrie Seales of Waldoboro, was a delightful hostess on every occasion, to medical men and citizens alike.

Good Warren, those who knew you will miss you greatly, whenever they enter Waldoboro, or look around for your beaming face at our Annual Meetings.

J. A. S.

Harry Lyman Putnam, M. D.

One of the founders of the Aroostook County Medical Society, and a past president; for many, many years a practitioner in Houlton until his removal to St. Petersburg, Florida, in 1919, Dr. Putnam was one of the leading practitioners of northern Maine. The writer recalls with gratitude and thanks the helpful hand extended by this tried public servant and loyal friend to him as young man. Surgery twenty-five years ago in Aroostook County was done in private homes, under all the trials and difficulties obtaining, and I pleasantly remember the comradeship and friendly aid in many and many a critical case. To-day, with our modern highways, fast automobiles, hospitals and trained personnel, we have stepped far, far ahead of the days when physicians drove many a weary mile through the hot days of summer and the biting cold of winter, yet for years and years Dr. Putnam performed the arduous work demanded of a general practitioner until a tired and hard-worked body and mind demanded a rest. Throughout the war he willingly helped the Local Draft and Advisory Boards, his counsel so many times helping over many a hard bit of road, and he worked many days and nights when fairness to himself and family demanded a let-up. The last few years of his life were spent most happily in St. Petersburg; there he enjoyed the wonderful climate with a limited clientele of private patients and with the door open to old friends, who were welcomed in a manner that showed his true happiness in being the happy host. On a trip to the South last spring, Mrs. Jackson

and I spent a few days with this beloved friend, and little we thought as he bade us a cheery farewell and to be sure to come another year that we were hearing his voice for the last time. Medicine may be hard, it undoubtedly is, but one thing it often does—gives one some truly wonderful friends. Harry Putnam was all that.

F. H. JACKSON.

County News

Androscoggin

The Androscoggin County Medical Society held an outing and meeting on July 20th at Noraco Inn. After a baseball game, St. Marie's Hospital vs. C. M. G. Hospital, in the afternoon and dinner, Dr. William H. Watters of Boston spoke on "The Problem of Asthma with Special Reference to Nasal Factors."

Notes

Allergy

Allergy has been defined as hypersensitiveness of body cells to one or more specific proteins. When such a protein, called an allergen, comes in contact with the sensitized cell, morbid conditions occur which cause symptom complexes regarded as allergic diseases.

State Department of Health

May statistics were reported as follows: Births: 1100, rate, 16.56; deaths: 890, rate, 13.44. Cumberland County reported the highest number of births, 211, rate, 18.84, and also deaths, 161, rate, 14.40. Franklin County showed the smallest number of deaths, 20, rate, 12.00. Deaths due to influenza numbered 9; meningitis cerebrospinal, 1; meningitis tuberculous, 2; pneumonia, 87; syphilis, 2; tuberculosis (all forms), 29; whooping cough, 8.

Medical Clippings and Notes

"Fractures of the Back of the Femur"

Johannson of Sweden has found 3,940 fractures and dislocations in a hospital service of the last ten years, and out of that number 390 were fractures of the neck of the femur. There were 289 women and 101 men. Owing to high average age, mortality was as high as 20 per cent. Treatment was unsatisfactory until plaster of Paris had been utilized after placement had been corrected by abduction, extension and inward rotation. After various failures with operative treatment, the writer has invented what he styles extra-articular osteosynthesis, which replaces the plaster of Paris treatment, and the various other operations which entail exposure of the fracture.

This medical note of really great interest can be found in the *British Medical Journal* for July 21, 1934, page 9, in the Epitome of modern Medical Literature.

"Syphilis in Practice"

There is a very clever paper on "Syphilis in Practice" in the *British Medical Journal* for July 21, 1934, page 99, and a very curious case is printed in which after what seemed to be six years total absence of syphilitic symptoms, a serum relapse occurred and required treatment, as imperative. "Cured" and "hopeless" are two adjectives that should be erased from the physicians' assertions and belief. Nobody is really ever cured, nobody is ever really hopeless, until death proves both to be truly said and properly justified in use.

Notices

The American College of Physicians will meet in Philadelphia, 1935

The American College of Physicians will hold its Nineteenth Annual Clinical Session in Philadelphia, April 29-May 3, 1935.

Announcement of these dates is made particularly with a view not only of apprising physicians generally of the meeting, but also to prevent conflicting dates with other societies that are now arranging their 1935 meetings.

Dr. Jonathan C. Meakins, of Montreal, Que., is President of the American College of Physicians, and will arrange the Program of General Sessions. Dr. Alfred Stengel, Vice President in Charge of Medical Affairs of the University of Pennsylvania, has been appointed General Chairman of local arrangements, and will be in charge of the Program of Clinics. Mr. E. R. Loveland, Executive Secretary, 133-135 S. 36th Street, Philadelphia, Pa., is in charge of general and business arrangements, and may be addressed concerning any feature of the forthcoming Session.

Army Reserve Needs Doctors

The surgeon general of the United States army is asking the coöperation of all Class A medical schools, superintendents of approved hospitals and medical societies in an endeavor to stimulate interest in the medical reserve in order to bring the corps up to authorized strength, according to the Journal of the American Medical Association. The present strength of the medical reserve is less than 9000, less than half the number that would be required in the event of a mobilization. An applicant for appointment must be a citizen of the United States or the Philippine Islands, between the ages of 21 and 35, graduate of a recognized medical college, must possess a license to practice in some state, territory or the District of Columbia, must be actually engaged in the practice of medicine and must meet the physical requirements of the army. Physicians desiring appointment should make application to the commanding general of the corps area in which they reside. Further information may be obtained from the Surgeon General, United States Army, Washington, D. C.

Announcing the Appointment

*Made June 28, 1934, at the
New York State Agricultural Experiment Station,
Division of Bacteriology,
Geneva, New York*

of

CLIFFORD D. KELLY, M. S., Ph. D.



*as Bacteriologist
and Director of Laboratory*

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Literature on request

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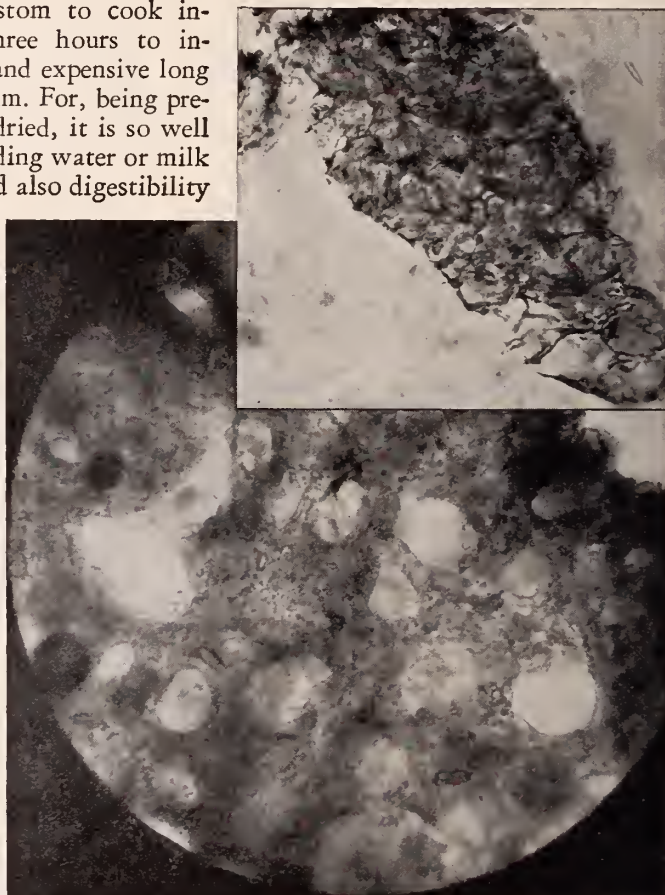
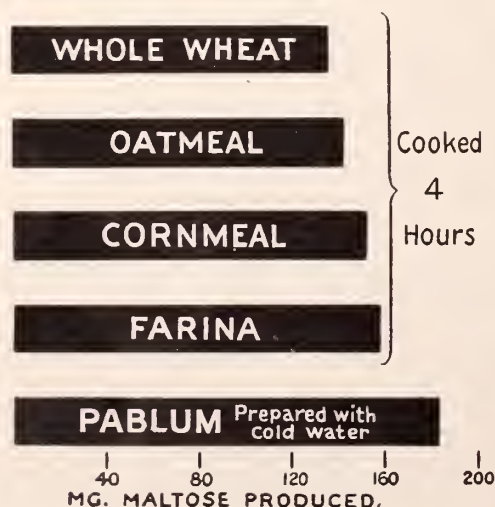
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Why Starch of PABLUM Is More Quickly Digested than that of Long-cooked Cereals

FOR many years it has been the custom to cook infants' cereal one, two, and even three hours to increase its digestibility. This bothersome and expensive long cooking is proven unnecessary with Pablum. For, being pre-cooked at 10 pounds steam pressure and dried, it is so well cooked that it can be served simply by adding water or milk of any temperature. Photomicrographs and also digestibility studies *in vitro* give evidence of this thorough cooking.

Fifteen cereals (both cooked and uncooked) studied microscopically were revealed as containing many starch granules, most of them massed into dense clumps. *Such unruptured clumps were never observed in hundreds of examinations of Pablum.* The latter consists, rather, of porous flakes which, like sponges, drink up liquids. Hence Pablum can be entirely saturated by the digestive secretions. This is borne out by studies of Ross and Burrill who found that the starch of Pablum is more rapidly digested than that of ordinary cereals cooked 4 hours.

Table shows that maltose production is much greater for Pablum prepared with cold water than for other cereals cooked 4 hours. Ross and Burrill (J. Pediat., May 1934) conclude from this and from the total soluble carbohydrate formed that starch digestion of Pablum is more rapid than that of 6 other cereals.



140 X. STAINED

(INSET) 290 X. STAINED

Large photomicrograph: Pablum mixed with cold water—portion of large flake. Pablum flakes are honeycombed with "pores" or air-spaces (note light areas). This porosity permits ready absorption of digestive fluids by the entire flake. No starch granules appear—they have been completely ruptured.

Inset: Farina cooked 1/2 hour—clump of tissue including starch granules. Note density of clump and lack of porosity. Many starch granules, such as are present in raw cereal, remain unchanged in form.

BESIDES being thoroughly cooked and readily digestible, Pablum supplies essential vitamins and minerals, especially vitamins A, B, E, and G, and calcium, phosphorus, iron, and copper. It is a palatable cereal consisting of wheatmeal, oatmeal, cornmeal, wheat embryo, alfalfa leaf, beef bone, brewers' yeast, and salt.

Reprint of Ross and Burrill paper sent on request of physicians.

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Maine MEDICAL JOURNAL



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September, 1934

No. 9

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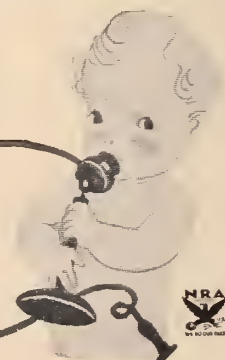
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Maine Medical Journal

The Official Organ of
The State and County Medical Societies

Vol. XXV

Portland, Maine, September, 1934

No. 9

Editorials

Diseases of Musicians

We are printing in this issue a paper on *Diseases of the Musical Profession*, by Dr. S. H. Kagan, read at our last Annual Meeting, truly a most unique subject and one rarely mentioned in books, magazines or in conversation. And yet, after our attention to it has once been called, we can hardly think of another topic of more real interest to a large number of teachers of music and practitioners of medicine. From the minute that you begin to think of the wide subject you are inclined to wonder why books concerning it have not long been on our book shelves. For if you think of the part played by the fingers, wrists, arms, elbows, legs, mouths, lips and teeth in the production of musical sounds, you see at once how many human affections might and do arise from the handling of the many varieties of musical instruments.

Let us first call attention to the violinist, who plays his instrument as it is held against his neck, where sometimes a swelling and hardening of the tissues occurs and needs medical attention. Constant bowing with the right arm produces cramp in the elbow joint from which some players complain. Then we extend our observation to the left arm and notice the fingers and their rapid motion over

the strings, and what with runs and trills accomplished with the fingers, we can easily understand the frequent complaints of finger cramps, often needing months to cure by gradual, systematic exercises. Trilling on the violin gradually produces a trembling of the delicate tendons and calls for medical care to prevent the artist falling into a neurotic condition.

Take a look at a cello, an instrument of wonderful beauty for producing sounds, and see how the player's legs have to be separated to hold it in convenient positions in order to give out the charming tones of the instrument beloved to many a human ear. Nervous affections from this cause sometimes need attention.

Almost everybody plays the piano, yet how often we hear of wearied fingers and wrists from too long continued daily practice. Then there is the trill, which, when skilfully executed, recalls to our delighted ears the wild woods of our country rides or walks. By and by the fingers ache, and they call for mechanical and vibratory treatment.

The trombone, with its cheek-filling blasts and long-stretching-out of the arms for varying octaves, sometimes brings out swellings and malformations of the lips; so, too, with the cornet and horns of various types. The effect of these cheek movements calls for

advice and treatment, and we must not forget the inflation of the middle ear so often produced and tending to widen the Eustachian tube to the advances of deafness.

Without permitting our pen to add to the list of true diseases of musicians, we must call attention to the number of teachers of music, all of whom ought, from time to time, to be invited to a medical meeting by some interested member, or some musical friend could speak before our medical meetings on some of the odd diseases of musicians to which so many young children are likely to be subjected at school or in the home. Think it over, fellow members, perhaps you recall in your own personal practice cases of blistered fingers of violinists, or tender teeth, lips and gums of those who play wind instruments, or those innumerable players of the piano to whom we would love to listen longer had not some cramp or articular joint in the fingers and palm of the hands already produced disease and annoyance to the scholar and to the listener and to the teacher.

Finally, we shall never forget the solo violinist who was obliged to abandon her beloved instrument until we personally recommended to her just what sort of exercises and for just how long and for how many days she would have to wait until in a space of a month and a half she was gradually but practically cured.

This is a small topic in the practice of medicine, but it is worthy of the attention of physicians.

Our County Secretaries

Now is the time for our County Secretaries to begin to plan for the meetings of the approaching winter. First of all these officials have to think of collecting the dues in order to keep our Association in motion. We are surrounded on every side by schemers for this and that ideal benefit of the people, but they will only result in the subjugation of the profession. Just as no one can collect a coupon without first signing his ownership, so we soon will be compelled to sign prescriptions which have been countersigned by State officials. We shall be the slaves of people in trying to cure them instead of

being their masters for the time being. So we say to our Secretaries, start first of all and get the dues from each member. Make your County members realize how important it is that we have a united powerful State organization in these stormy times.

So let us bring up the topic of assessment to keep the Maine Medical Association alive and in working order. The yearly dues in many state medical societies throughout the Union are twenty-five dollars, and we are lucky to be able to carry on our Organization for less. Considering, for instance, that your editor labors without wages to bring forth a monthly Journal and reads a hundred medical journals from the four quarters of the world, he thinks that others might make some sacrifice to keep our ancient Society alive.

Let our Secretaries hunt around for amusing and instructive papers to submit to the JOURNAL for publication. Has any member met with some unusual case or accident recently? What is his experience with motor car accidents? Are such accidents avoidable, and does defective sight and intoxication play any part in them? Who is to pay us for our time and trouble in attending such emergency calls at hospitals?

Secretaries, consult your Scientific Committee for speakers at your County meetings. Do not too often invite specialists from afar who sometimes talk a language difficult to fathom.

Other subjects we may call attention to in a subsequent paper.

Medical Education in Maine

In a survey and report on the medical facilities of the State of Maine, the Planning Board finds that there is less than one physician to each thousand residents in the State. This ratio is lower than the average throughout the greater part of the country. Another fact disclosed is that some districts have no resident physician. On the basis of these findings it is recommended that a medical school be created in Maine to afford young men and women an opportunity to become physicians and thereby correct the deficit in these districts. A medical school serves as

A Medical School in Maine

A small medical school in Maine of not over two hundred students would involve an annual expenditure of something like \$200,000.00 a year. This, of course, does not take into account the original cost of buildings and equipment. Where is that money to come from? Having it in hand, who is to spend it? Every clan of doctors wants its own methods at the top, and it can hardly be a secret that a school from afar longs and sighs for a permanent jurisdiction over the Maine Medical Association and its members. Our Association represents the growth and progress of modern medicine in Maine, mostly by Maine men and under the medical conditions of Maine.

The story of Maine without a medical school is known to us all, and, acknowledging our small defects, we are willing to widen our view, to study the present and look longingly into the future and build substantially.

The greatest fault of human nature is exaggeration of a pretended cause for everything. A boy meets with an accident miles from a competent surgeon — such a man sails with outspread wings to the distant sufferer,

but the boy dies. Up goes the cry that his life was lost by the lack of physicians near at hand. Oh, ye foolish schemers who know the very slightest whether the accident was bound to be fatal or not. In their ignorant, overrated enthusiasm for haste, quick work, latest remedies, they cast aside any exact knowledge of the state and extent of the accident and shriek, "Another young life lost." Oh, ye thoughtless, who knows what that life would have come to in the long run compared with other lives of to-day? Who knows that had any practitioner of medicine been on the spot, even he might not have saved that life?

Maine is well supplied with physicians, as we learned from the Survey made by our Committee on Public Relations in 1931. About the same conditions exist to-day. To answer the reformers who are shouting to one another that the rural population of Maine needs more physicians, we might quote from the Committee's Report, "the solution of many of our rural medical problems lies not in more physicians . . . but in better summer roads and winter roads opened for the automobile."

"Men in White"

It is curious that the entire world of medicine and surgery interested in the Stage, should on one and the same and successive days, and even weeks, be watching with intense interest the play about Surgeons, Hospitals, and trained Nurses called "Men in White." You cannot take up a newspaper from any foreign lands for the month of July without reading in all their various languages some careful and sympathetic notice of "Men in White." The very title is most attractive. People wonder who those men can be. Are they trained athletes, and for exactly what game, and so they flock to find out from the start that instead of playing a game out of doors, under the bright light of a summer's day, they are watching men and women at work over human misfortunes and accidents, and all going on beneath the glare of electrical illumination. The play is carefully staged, the scenery, as you may say, is true to hospital life, and whatever is surgically performed is done so according to medical art of today. The love affair seems to us to be badly managed and rather casts a gloomy look over the career of a trained nurse, who deserve gratitude for their resistance to the contiguity of men in a hurry to get gone to some other scenes out of their daily life.

As ours is not a theatrical Journal, we cannot commend or defend or exaggerate the excellent showing made by this actor or actress or another, yet we can truly say that the cast exhibited was satisfactory to the play, really a play of great value

and interest to the medical profession all over the world. Yes, indeed, "Men in White" is a play that surgeons should see, and we suggest that it should again be shown in various cities in Maine, specially advertised for members of the Maine Medical Association.

Those who cannot get to see the play from the stage will find it, as printed, very interesting reading after laying aside a favorite medical journal of the day.

Lab and Labory

Much as we detest slang, there are certain terms which we approach with a sort of affection, one of them being just "lab" for laboratory, which is rather a long word to pronounce on every occasion, especially when we want to rush to IT in haste for an examination in a case involving perhaps life or death of a patient. But now it seems that as the Movies have despoiled our sense of hearing and of seeing, to a great extent, they are laying hands on our language no matter whether scientific, friendly or medicinal. The chief instance noted of late is the annihilation of our favorite abbreviation, "lab," and substituting the word "labory." It must be pronounced labory with a long "o" for laboratory. Our word is now, as we heard in "Men in White," called labory, accenting the bo, and our ears are shocked during an entire scene with the unauthorized pronunciation of our beloved, faithful and friendly "lab" for short.

Clinical Session of the Maine Medical Association

PORTLAND, MAINE

OCTOBER 4TH AND 5TH, 1934

Maine General Hospital

THURSDAY, OCTOBER 4, 1934

- | | | |
|-------------------|---|---------------------------------------|
| 8.30 A. M. | Registration of Members and Guests | |
| 9.30-10.30 A. M. | Operations: Surgical, Gynecological, Genito-Urinary, Ear, Nose and Throat, and Orthopedic Services | |
| | Ward Rounds, Inspection of Laboratories and X-Ray Departments | |
| 10.30-11.30 A. M. | Amphitheatre—Medical Clinic | |
| 11.30-12.30 P. M. | Amphitheatre—Clinical Conference—Medical-Surgical Staffs with X-Ray and Laboratory Findings | |
| 12.30 P. M. | Luncheon—Guests of the Maine General Hospital | |
| | Amphitheatre | Recovery Room, Seventh Floor |
| 2.00- 2.30 P. M. | Surgical | 2.00- 2.30 P. M. Ear, Nose and Throat |
| 2.30- 3.00 P. M. | Gynecological | 2.30- 3.00 P. M. Eye |
| 3.00- 3.30 P. M. | Genito-Urinary | 3.00- 3.30 P. M. Dermatology |
| 3.30- 4.00 P. M. | Orthopedic | 3.30- 4.00 P. M. Dental |
| 4.00- 4.30 P. M. | Obstetrical | 4.00- 4.30 P. M. Tuberculosis |
| 5.00- 6.00 P. M. | Reception at Home of Dr. E. G. Abbott, 17 Storer Street, for Members of the Maine Medical Association | |
| 6.30 P. M. | Dinner at Eastland Hotel, Guests of the Cumberland County Medical Society | |
| | Address: Timothy Leary, M. D., Boston | |
| | Subject: Coronary Sclerosis—a Metabolic Disease, with Analogies to Diabetes, Gout and Obesity | |

Maine Eye and Ear Infirmary

FRIDAY, OCTOBER 5, 1934

- | | | | |
|-------------------|--|-------------------|---------------|
| 8.30- 9.30 A. M. | Operations: General and Special | 11.00-11.30 A. M. | Pediatrics |
| 9.30-10.00 A. M. | Surgical | 11.30-12.00 M. | Laryngology |
| 10.00-10.30 A. M. | Medical | 12.00-12.30 P. M. | Ophthalmology |
| 10.30-11.00 A. M. | Dermatology | | |
| 12.30 P. M. | Luncheon—Guests of the Maine Eye and Ear Infirmary | | |



66 HIGH STREET

9.00-10.00 A. M.	Operations (Main Operating Room, Third Floor)
10.00-10.30 A. M.	Demonstration of Cases—Medical Service (Gymnasium, First Floor)
10.30-12.00 M.	Demonstration of Cases—Orthopedic Service (Gymnasium, First Floor)
12.00 M.	Luncheon—Guests of the Children's Hospital

231 WOODFORD STREET

12.30 P. M.	Luncheon—Guests of St. Barnabas Hospital
1.15- 1.30 P. M.	Some Unusual Cases of Diabetes
1.30- 1.45 P. M.	Presentation of an Unusual Fracture of a Cervical Vertebra
1.45- 2.15 P. M.	Moving Pictures of Two Unusual Thyroidectomies A Showing of the Removal of a Fibro Myxo Sarcoma Involving the Left Ethmoids, Sphenoid, Orbit and Antrum A Showing of a Radical Operation for a Case of Pansinusitis and Osteomyelitis of the Frontal Bone
2.15 P. M.	Operations: Hysterectomy with Avertin Anesthesia; Hernia with Spinal Anesthesia; Large Ovarian Tumor

On October 4th at 4.00 P. M. at the Purpoodock Club, tea will be served to the ladies of the members of the Maine Medical Association. Mrs. Dean B. Small, President of the Maine Birth Control League, will speak promptly at 4.00 o'clock. Transportation will be provided. Telephone Mrs. Philip Thompson, 2-2677.

There will be a meeting of the Council, County Secretaries, Legislative and County Auxiliary Legislative Committees at 4.00 P. M. Friday, October 5th, at the Eastland Hotel.

Dr. James A. Spalding will meet the members of the Editorial Board at his home, 627 Congress Street, Portland, at 9.30 A. M. Saturday, October 6th.

**Diseases of the Musical Profession*

By SAMUEL H. KAGAN, M. D., Augusta, Maine.

In spite of the fact that music, in its various forms, has a definite place in the life of every section of the country, there is very little in our literature dealing with the conditions and disabilities resulting from the practice of this art and profession.

Whether enjoyed in the simplest forms of untrained singing by the party soloist or barber shop quartet, or used as a means of livelihood by the orchestra player or concert artist, there are definite physical conditions and disabilities that may arise: for example, the laryngitis in the former group and the muscle cramps in the latter.

The material for this paper was gathered from personal contacts with members of the profession — students, teachers, musicians and artists, and the writer was particularly fortunate in having the two summer schools for music in Maine—the Eastern Music Camp at Oakland, and the Castine Summer School at Castine—extend him the coöperation of their faculty and students. Later, in New York City, the writer collaborated with Dr. Harry Shilkret, a member of a well-known family of musicians, who has studied and played the cornet from the age of three. Dr. Shilkret is thus a musician as well as a doctor of medicine.

The problem of musicians is to correlate the efforts of the eye, ear, and voice in singing, or the fingers in playing, into one well synchronized act, and disturbances in the balance between energy production and energy absorption may result. In order that technique be fluent, brilliant, sure, and eloquent with expression, it is essential that the musician show an endurance extending over years of systematic and persevering practice. Even those highly developed in technique may not escape practicing.

The demands which the musician's career places upon the student are enormous, often much greater than those encountered in the profession itself; therefore, the tendency toward occupational disorders will have already appeared during the years of prepara-

tion, and will not be delayed until maturity. Hence one finds these afflictions less often in general activity (vocal diseases excepted) than in the schools and conservatories. The better the school and its pedagogical methods, the rarer is professional disease.

PSYCHONEUROSIS AND INSANITY

In order to play music, to live in music, and to become engrossed in its technique, its essence, its forms and its ideas, one needs an especially attentive, impressionable, sensitive nervous system.

Beside the physical side (arms, fingers, throat), the spiritual and psychical sides also participate.

"The ability to adjust themselves to conditions and stresses of life is just as true with musicians as any other group. Struggles of the actual and imagined world, between endeavor and perfection, between fantasy and reality, are no different for the musician than anyone else. They have no different personalities than any other group. The musician develops inferiority complexes and defense neuroses as a result of his inability to adjust himself to conditions and stresses of life, just as any other individual, and not because he is a musician. There is absolutely no evidence that music produces insanity. The insane may turn to music as an outlet for self-expression, just as he turns to the other arts."¹

TEMPERAMENT

All interviewed were in agreement that there was no such thing as temperament. This was best expressed by C. E. Whiting, a band and orchestra leader and instructor in Boston, who said, "There is no such thing as temperament. The display of emotion that musicians show is not temperament, but 'bull'"—just effect for show. E. R. Hill calls it "exaggerated ego."

TUBERCULOSIS

While musicians, in the struggle for life, are condemned to activity at night, and often

* Read at the annual meeting of the Maine Medical Association, Bangor, Maine, May 28, 1934.

to unhygienic, smoky public places, as cafes, movie picture houses and theatres, dance halls, etc., and who are exposed to poor ventilation, may develop a lowered resistance to infection, this is mainly the result of improper habits of eating, living and rest, and not because of the instrument played or profession. There is no evidence that musicians are subject to tuberculosis because they are musicians.

ALCOHOLISM

It is often asserted that musicians are particularly addicted to drinking. Statistics concerning this cannot be found to decide whether musicians are actually given over to the use of alcohol any more than others.²

Neither are there any statistics at our disposal as to the use and abuse of tobacco.

Constipation and *Hemorrhoids* often occur as a result of faulty living and habits, together with the fact that the long rehearsals and concerts preclude one from attending to the calls of nature at those times.³

Included in the musical profession are the creators of music, the composers and writers, copyists, interpreters, the conductors, instrumentalists, and vocalists, and each may develop disabilities peculiar to that particular group.

WRITERS' CRAMP

Among professional musicians, writers' cramp is not very frequent, yet the musical author, critic, composer and copyist may be afflicted with it. As with many of the muscle cramps, there may often be a large psychic factor involved. The symptoms are quick fatigue, discomfort, paresthesias, pains and tenseness of the fingers, hands, and upper arms, with spastic contraction of the muscles involved. While the complaints are often concentrated in the hands, they may also involve the shoulders and back. Poor methods of writing and over-use are the main causes aside from the psychical influences.

The underlying etiology producing the muscle-strain conditions is that of continuous repetition of movements, pressure or blows.⁴ After continued exposure the muscles involved do not function when called upon to perform the accustomed task, although their

function is unimpaired for other activities. With fatigue muscles become powerless, and pain may appear. Thus the violinist or the pianist feels his hands becoming powerless, and the singer, his larynx muscles. One has pains in the arms, the other in the side of the throat. The injury does not stop with the muscles involved, but may cause inflammation of the surrounding sheaths and tissue, as myositis, bursitis, or synovitis. Sometimes they appear as hyperesthesias of the skin, but occasionally in the invasion of the pains and symptoms of fatigue into other muscle groups. This frequently happens to be due to the fact that in the stalling of individual muscles, other active substitutes come to the rescue—muscles which have similar or equal functions, but which, with pain, respond quickly to unaccustomed requirements. Thus it occurs that when a vibrating finger in a violinist is painful, the upper arm, in order to bring relief, is also vibrated. The result is an excessive contraction of the biceps, and pain in the strained muscle. Similarly, shoulder muscles are incorrectly employed in the place of balking arm muscles.

DIRECTOR'S CRAMP

C. E. Whiting⁵ said that in beating time his right arm and elbow locked, and felt tired. He would then change the beating of time to the other arm, and the condition would clear up in about five minutes, aching in "coming out" only. He also stated that some directors get cramps in the legs, when they use the legs, and more particularly the knee, in beating time.

A personal communication from an English musician⁶ reports "neuritis" of the right arm as occurring in conductors, but the term "neuritis" is commonly misused for such painful conditions as myositis, bursitis, synovitis and arthritis. Also, the intense concentration involved in conducting often results in marked mental fatigue as well as muscle fatigue. This usually clears up after sufficient rest.

VOCAL

Correct method of breathing and tonation are essential in vocalization.

Overexertion, colds, and abuse of the voice are the most essential factors which can be

established as causes of the professional disorders of singers.

Thus one artist in New York City told me that she developed laryngitis through chilling of the vocal cords, producing acute congestion and thickening of the cords.

If we follow the progress of laryngeal change caused by chronic catarrh of the upper and middle pharynx, we should mention such actual changes in the vocal bands as inflammatory congestion and thickening. A thickened cord coming in forcible contact with its neighbor necessarily puts too much pressure on itself, and the result is a callus on its edge—a "singer's" nodule, or corn.⁷

Strangely enough, it is a nodule of this type that has made Bing Crosby famous in the radio world as a crooner.

In general, the nodules of singers are regarded as a professional disease. According to the experience of famous investigators (e.g., Gerber) they are also seen in persons who have never sung. These thickenings on the edges of the vocal cords are a very frequent cause of hoarseness with adults as also with children. Singers' nodules are surgically removed more often than they actually exist.

There is not a single disorder of a speaking or singing voice, from poor articulation to detonation, from the tremolo to complete voicelessness—which cannot originate from a nervous basis, which cannot be intensified by mental causes, and which cannot be improved or cured through mental influences.

Effect of Tonsillectomy

Tonsillectomy does not affect the larynx in singing but as reflex spasm; the effect is on the soft palate, and is definite as in damage and scars of the anterior and posterior pillars.

INSTRUMENTAL

Musical instruments fall into three great groups or families, according to the way they produce their sounds: those in which the sound comes from vibrating strings are known as "stringed" or "string" instruments, as the violin, piano, and harp; those in which a column of air is set in motion are called "wind" instruments, as the flute, clarinet, cornet, and organ; and those which themselves are set vibrating by being struck are

called "percussion" instruments, as the drums and bells.

The playing of each instrument presents conditions and disturbances peculiar to that instrument, though there are disabilities which may result from causes common to a group or several groups.

Disabilities of the Pianist

Louis Cornell,⁸ instructor of pianoforte at the New England Conservatory of Music in Boston and the Eastern Music Camp in Maine, demonstrated to me the *raison d'être* of the disabilities resulting from playing the piano, explaining the strained positions previously taught and the present relaxed more natural methods. Immediately the thought came to mind that here was an answer to that question that physicians frequently get from parents—"What makes John, or Mary, so tired out at the end of the day?" What with studies in school, play, and practicing the piano, the older methods were conducive only of fatigue.

From the position of acute flexion of the wrists in playing octaves, especially in weak wrists, there results the "weeping sinews," cyst or ganglion of the wrist. Apparently the family Bible is still used to rupture these swellings, from various comments heard.

Fatigue, muscle pains and cramps, often misnamed "neuritis," involve the shoulders and spine. This is particularly so in the old method of teaching, where the player sat back on the chair with the body rigid, and he had to elevate the shoulders and hands in octave playing. Under the modern instruction the pianist sits forward, nearer the edge of the chair, and is taught to move the body with the swing of the hands playing up or down the keyboard. The spine is not held rigid, but relaxed, especially for soft music, except in getting tension for octave chords and forte, when the spine is arched, to relax again as soon as that particular forte or run of octaves is finished.

The stretching and strain in octave playing often results in cramps and absolute incapacitation. Nathaniel Shilkret, the now prominent New York conductor, told me that he developed a very painful right hand and forearm from overdoing in octave playing, especially from Brahms. He had it for seven

months, and had to give up playing the piano as a result.

Another musician, who had played the piano in the early days of the movies, complained of fatigue pains of the shoulders and back, from the long hours of playing.

In addition to the above disabilities, cramps of the legs arise, partly from the sitting position, and partly from the strain and tension in pedalling.

Violinists

Violinists also develop ganglion of the wrist from the acute flexion used.

The fingers and hands develop cramps, weakness and paralysis from overuse.

Case reports. One brilliant violin student developed cramps of his fingers and forearm flexors, with stiffness of the wrist, stiff slow motion of the fingers and loss of strength.

Another case that came to my attention was that of a Russian violinist in a Montreal Night Club, who developed paralysis of his fingers. The fingers were semi-flexed; if straightened out by the other hand they would remain so, or would stay in any placed position, but there was no voluntary control, due to too much playing. A rest of three months followed by finger exercises restored him to usefulness.

The right and left hands may be equally affected, pain appears in the fingers which press the strings, and disagreeable sensations in the bowing hand. Quickly appearing fatigue in one or both hands or arms is observed more often than cramps. The disorder usually begins in the flexors and with continued practice muscular tension of the extensors appear.

Pain in the legs due to wrong postures in standing, and pain in the shoulders result from abnormal positions of bowing or holding the instrument. Inclining the head too much, and, in addition, a severe overexertion of the neck and shoulder muscles, sometimes result in permanent torticollis.

Pressure of the lower jaw on the violin may cause bruising with ecchymosis, pigmentation of the skin, and sometimes ulceration. Infection of the skin—dermatitis and folliculitis—may result from sensitivity and irritation from sweat.

The finger tips become thickened with calluses from pressing the strings.

Dermatitis of the fingers and hands may result from sensitivity to resin, horsehair of the bows, and catgut strings.

Cellists

Cellists develop "sleepy legs" from wrong posture. They develop cramps of the arms and shoulders less often than violinists because the arms are suspended and not raised in playing.

Bass Violists

Bass Violists develop blisters, calluses and tears of the skin of the fingers from slap and plucking of the strings, which, because of the greater frequency in playing jazz, has come to be known as "jazz slap."

Harp, Banjo, Guitar and Mandolin

The fingers in the beginning develop blisters, then the skin hardens with callus formation. The skin of the fingers may also be cut from string plucking.

WIND INSTRUMENTS

There are two kinds of wind instruments: those in which the mouthpiece is pressed against the lips, as the flute and the brasses—the trumpet, cornet, and trombone; and those in which the mouthpiece is held between the upper and lower teeth, as the reed instruments—the clarinet, saxophone and English horn.

The term embouchure³ takes in the entire use of the mouth and lips in playing wind instruments, and includes:

1. The lips, which are most important.
2. The tongue.
3. The soft palate, which has something to do with pitch.
4. The bellows, or breathing, which should be abdominal and not thoracic.

Outside embouchure refers to the method of playing those instruments in which the mouthpiece is pressed against the lips, and inside embouchure to the method of playing those instruments in which the mouthpiece is held between the lips.

There are different methods of use of the lip in playing any wind instrument. The old

pressure method of outside embouchure depends on pressure of the mouthpiece on the lips against the teeth, and paralysis of the lips, usually the upper, often results. Cuts and ulcers of the lips result from tooth trauma. In the pressure method you also depend on contraction of the mouth muscles to give tones.

Case report. J. M.—, who played the trumpet in an orchestra, found that his upper lip refused to hold the wind pressure from the mouth, and that his lip became flabby and appeared thinner and longer. He was unable to get his tones, and had to give up the trumpet. The apparent thinning and lengthening of the lip was due to lack of muscular tonicity.

In the non-pressure method, you depend on the contraction of the mouth muscles to vary the size of the aperture of the mouth. The smaller the aperture of the mouth the higher the tones. Therefore you must have more pressure of the lips against each other.

The non-pressure method is not supposed to use pressure against the teeth, yet some pressure is required to get the high notes. This is seen from the following observation made of Walter Smith, Boston's prominent instructor of the non-pressure method, while playing difficult cornet solos: "Walter Smith's lips, after the solo, were white and bloodless, yet all he did was to wiggle his mouth about, and the color came right back."⁵

There is good anastomosis in the lips for there are no end vessels, therefore there are no circulatory troubles with cornetists. You do not find infarcts in the lips. Gastro-intestinal disturbances cause poor lipping from dryness of the lips and tongue. Herpes of the lips may result from allergy, as from nuts, etc. Wetting the lips causes chapping. The lips should be wiped after playing. Scales on the lips—keratinization—results from playing, and clears up when you give up playing. Infection of the lips and chin usually results from a dirty mouthpiece, which is sometimes thrown into a bag or case. Occasionally infection of the chin or lip is due to sweating and skin sensitivity.

Case report. Shilkret³ mentioned the case of a Philharmonic player who persisted in playing when he had infection of the glands

of the skin. This resulted in lymphoedema and fibrosis of the lip, and he became unable to play. Infection of the upper lip gives trouble in getting the high notes, and infection of the lower lip results in trouble in getting the lower notes.

Psychoneuroses are of great occurrence because of fears established—fears of inability to get the correct notes, and so leading to fear of losing a livelihood by loss of position.

Case report. A saxophone player changed his instrument, got worried about getting the notes, developed spasm of muscles of the lips with tightening of the lips—and fatigue—and neurosis resulted.

The teeth act merely as a support to the mouthpiece, and with proper methods and technique of playing should not be affected in playing. With wrong technique the playing of reed instruments may cause protrusion of the upper teeth in those whose permanent teeth were being erupted, or had recently erupted. Trumpet playing may cause inward displacement of alignment in the young. Leucoplakia may occur in trumpeters due to pressure of protruding teeth. Shilkret reports a case where a dentist made a plate to keep off the pressure.

Reed Instruments

In America, the clarinet, saxophone and sarrusophone are played with the lower lip over the lower teeth, and the upper teeth on the mouthpiece of the instrument, while the oboe and bassoon are played with both lips covering the teeth and the reed resting between the lips enclosed by the teeth. In some European countries, as France and England, the clarinets are played as the oboes are—the lips covering both upper and lower teeth. Some pressure must be used with all reed instruments to reach the registers. Thus it can be readily seen that this pressure of lips on the teeth can produce cuts and ulcers of the lips, while reed trauma of the tongue results in cuts and ulcers of the tongue.

Are oboeists "crazy"? This seems to be a popular hearsay in this country, yet all evidence is against this belief. Oboeists are not "crazy" any more than any other class. The oboeist worries about the reed in playing; it warps readily and does not hold its shape, and so the player has difficulty and worries

about his notes. He becomes apprehensive as to damage to the delicate reed. As the oboe requires only a small amount of air, the player is required to let out the excess of air when playing, and, when properly instructed, develops no lung troubles.

Lip, tongue and neck muscle pains and cramps may result from playing any wind instrument for a length of time, but can almost always be attributed to an incorrect method of playing.

Occasionally one develops pains and cramp of the thumb, which holds the weight of the cornet, though the modern instrument has a counterweight piece. The left hand may develop cramp from supporting the flute.

The lungs are often benefited by wind instruments; therefore these instruments are recommended for cases of empyema and atelectasis. There is no evidence that wind instrument playing causes tuberculosis, yet in tuberculosis one should advise against the use of wind instruments, as it is the opposite of stabilization of the lungs.³

Flesch⁹ records: "It has been the erroneous belief for a long time that players of wind and brass instruments have a special predisposition for diseases of the lung and for hemoptysis. Fischer, Pretin, Leibkind and lately also Jagie have made thorough investigations in the case of military bands, performers on brass and wind instruments at the Vienna Opera, and in the case of concert orchestras, and have found this superstition without foundation. Jagie made an X-ray examination of 46 performers on brass and wind instruments ranging in age from 25 to 68 years, with an average daily performance of five hours. Jagie arrives at the conclusion that there is no evidence that the playing of instruments requiring air pressure can lead to pulmonary emphysema.

That in players of wind and brass instruments the air pressure in the thorax and in the pulmonary vesicles increases is certain beyond a doubt. One can observe the impaired reflux of the venous blood from the vessels of the head by the redness of the skin and the swelling of the congested veins. In spite of this, the author found no predisposition to vascular rupture except in individuals who use alcohol excessively. Due to the in-

creased activity of the abdominal muscles in brass players, their abdominal apertures are somewhat endangered. But even in this respect the author found that only individuals with a predisposition to hernia may contract an inguinal hernia at a relatively early stage."

Trumpet playing aggravates asthmatic conditions and so tends toward emphysema. As there is no cure for emphysema, it may result in incapacitation. Cases of otitis media may be exacerbated by wind instruments.¹³

At the Eastern Music Camp I saw two boys who claimed they were developing a crook in the little finger, one from playing the mellophone, and the other the French horn.

Organists

Organists occasionally develop pains and cramps in the hands and arms, as do pianists, but are more liable to fatigue pains in the legs and feet because of the greater use of the feet in pedalling.

Cancer

In spite of the traumatization of the lips in wind instrumentalists, the thickenings and callus formation, cancer is rare. Falk¹⁰ says that the reason these callused thickenings do not develop cancer, in contrast to pipe smokers' calluses and cancer, is that in the use of the musical instrument there is no loss of surface epithelium, whereas with smokers the surface is pulled off, causing ulceration almost each time.

PERCUSSION INSTRUMENTS

Drummers

Drummers may develop muscular pains and cramps in the hands and forearms from wrong methods or excessive playing of the snare drum. The present jazz music has resulted in drummers suffering from pains and cramps in the leg from playing the bass drum.

In those musicians suffering from arthritis due to focal infection, as the teeth, the part that is worked the most is the part that becomes involved; pianists get arthritic involvement of the hands and wrists; drummers in the feet.

Flat Feet may result from standing and wrong postures.

Allergy and Dermatitis^{11 12} may be due to the finish on violins, wood wind instruments, and from metal parts, in addition to the resin, horsehair and catgut already mentioned.

Eyestrain may result from writing and reading music, especially with poor illumination, and ill-fitting lenses.

TREATMENT

Accurate diagnosis must first be established, and this requires a thorough physical, neurological, and often psychological examination. Organic disorders have to be differentiated from nervous and psychic disorders. The causes of the disorders must be eliminated where possible.

Fatigue in practice and playing is usually due to poor instruction or methods. Rest, often absolute, may become necessary. One should not play or practice for hours without rest periods; this is particularly important with students.

Vocal disturbances require rest in cases of overuse, detoning in cases of poor voice placing, and correct methods of breathing. Removal of nodes may be necessary, though correction of the producing causes may result in their disappearance.

The various muscle pains and cramps, aside from rest and correction of poor methods of playing, may require re-education of the muscles. Massage, hydrotherapy, and active and passive exercises should be attempted. For the acute pain and cramps, heat, as diathermy, baths, lights, is of value. Medication is of little value. Electricity in the form of faradism and galvanism is of questionable value.

Ganglion of the wrist may be ruptured by puncture or a blow, or may be excised. Recurrence may take place.

With wind instrumentalists, do not prescribe fat applications for the lips, as it causes the mouthpiece to slide about, and this is serious. Surgery of the lips should be avoided, as you may spoil the lip, even though you get perfect anatomical result, because of the neurosis established from worry and fear of inability to get the notes.

SUMMARY

The disabilities and disorders of musicians are practically all due to fatigue resulting from overuse of muscles, or wrong methods of instruction.

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Report of the Financial Secretary—July 1, 1933, to June 30, 1934

To the Officers, Executive Board, Directors, Members and Friends of the Maine Public Health Association:

I herewith respectfully submit my seventh annual report of the financial condition of our Association:

The total amount received during the year just passed was \$53,298.90, which includes the balance left in our treasury a year ago, of \$2,516.22. The total expenditures over this period amounted to \$50,757.97, giving us a balance of \$2,540.93 with which to begin the new year. A brief glimpse over the reports of past years shows these figures have decreased greatly; the annual reports reveal budgets approximating \$80,000.00 during the more prosperous years of 1928, 1929 and 1930. While the decrease in available funds has handicapped our program to a certain extent, the entire staff has endeavored to keep the work up to standard, and has met the emergency valiantly and loyally, volunteering salary cuts, taking vacations without pay, and assisting the financial secretary in raising the necessary budget in every possible way.

One important question asked invariably by the Officers and Executive Board at its monthly sessions is: "What is the financial standing of the Nursing Services directly affiliated with the Maine Public Health Association?" On June 30th, 1934, the Association had advanced to the Services the sum of \$2,835.95, all of which is covered by town appropriations or funds derived through special drives, so that the Association will be reimbursed for this amount, which it has temporarily loaned the Nursing Services in order that their work may continue without interruption. Special mention should be made of the York County Nursing Service, which, a year ago this time, owed the parent organization about \$1,100.00, and had all of its funds in a closed bank. It now has reimbursed the Association in full, and has all of its current bills paid, in spite of the fact that only \$400.00 has so far been released from the bank for its use. Another Service which should be mentioned is the Augusta Tuberculosis Prevention Service, which was temporarily discontinued owing to a lack of funds. An interested citizen came forward with an offer of \$500.00, provided a duplicate amount could be raised. At the present time about \$460.00 has been provided by local organizations, and the balance will be secured very soon.

The town appropriations raised by vote of

the people in March, 1934, for services of the public health nurses on our staff, amounted to \$12,115.00. Comparing this with the \$10,590.00 appropriated for the same item in 1933, we note a considerable gain, which speaks well for the work accomplished by the staff nurses, and shows that the people appreciate the health program conducted by these loyal, efficient nurses of ours.

The total returns from the 1933 Christmas Health Seal and Bond Sale to date are \$26,277.88. Of the 1932 Seal sale funds, \$2,117.26 have been released from closed banks since December 1st, while the sum of \$5,404.43 (1932 sale) is still retained. The five per cent. to which the National Tuberculosis Association is justly entitled has been paid on all of the 1932 Christmas seal returns which have been released, with the exception of the \$2,117.26, and this will be paid immediately. Three counties in Maine increased their sale for this year. They were Androscoggin, Aroostook and Penobscot. Looking forward to the 1934 sale, we are hoping to see increases in every one of the sixteen counties, with the return of better financial conditions throughout the State. Hancock County still leads in per capita sales, with Penobscot County second.

The seal for 1934 depicts the "Little Red," the first sanatorium built in the United States. It is a colorful seal, and Maine citizens will like it, with its white snow, its green pines and its little red cottage. It is a commemorative emblem, for 1935 brings with it the fiftieth anniversary of the establishment of the first tuberculosis sanatorium in our country.

No report would be complete this year without making reference to Mrs. Eleanora S. Woodman of Winthrop, whose death occurred recently. Mrs. Woodman's interest in the work of the Maine Public Health Association covered a long period of years, and we realize we have lost a most helpful friend. Her gift of the "Woodman Audiometer," which has been in constant use, demonstrated her desire to assist, and her annual contribution of \$500.00 over a term of years has been much appreciated. Her interest in our activities prompted her to remember us in her will

most kindly, the sum of \$5,000.00 being left in trust for the Maine Public Health Association.

This year the Maine Federation of Women's Clubs coöperated in making possible the purchase of a moving picture machine, and we are very grateful to the individual clubs which contributed the sum of \$121.50. The machine will be purchased this fall, thanks to the excellent response of the Federated Clubs.

Through Mrs. Anderson's able assistance, a change has been made in the financing of the Clinics. Heretofore the Maine Public Health Association has paid for all X-ray films, whether the Clinics were held in territory retaining eighty per cent. of the Christmas Seal funds or not. At the present time, unless the Clinic is a demonstration, if the county in which the Clinic is conducted is affiliated with the Association, thus retaining eighty per cent. of the returns from the Christmas Seal sale, the County or Local organization pays for the X-ray films. This seems to be a fair decision, and has met with approval wherever it has been put into practice.

The Three-Quarter Century Club, organized by the Maine Public Health Association in 1925, and since that time sponsored by the same organization, met at Fort McKinley, Portland, on August 26th. The members enjoyed a very happy session, with an interesting program, the usual contests and a picnic lunch. It was through the efforts of Dr. F. Y. Gilbert of Portland that the Club held its regular meeting, and we are indebted to him for arranging for this enjoyable session. The five American Legion Posts located in and near Portland, together with the Auxiliaries, endorsed the entertaining of the Club members, while the officers at the Fort were the hosts. The Association is sincerely grateful to all who made the day such a success for the "young" folks.

In closing I wish to thank all those who have so generously helped in financing the work of the Maine Public Health Association during the past year. Special mention should be made of our three largest contributions: \$5,000.00 from Mr. William Bingham, 2nd; \$1,000.00 from Mrs. J. S. Stodder; and \$400.00 from the Maine Medical Association,

in addition to its kindness in giving space in the JOURNAL for the annual reports of the Executive Cabinet. To all others who have assisted — it may be by purchasing seals, or by taking out a membership; by serving as seal sale chairman, or by giving free transportation; by rendering professional service free gratis, or by assisting to secure a town appropriation — to all these I wish to express heartfelt thanks for their support and interest.

With appreciation of the generosity of my co-workers regarding my failures, and sincere gratitude to the Officers and Executive Board for their backing and helpful suggestions, this report is

Respectfully submitted,

ALICE H. MCGOULDRIK,

Financial Secretary.

July 1, 1934.

Report of Dental Hygiene Section—July 1, 1933, to July 1, 1934

GERALD P. CLIFFORD, D. D., Portland, Chmn.

DONALD M. SMALL, D. D., Kennebunk

EARL A. SAUNDERS, D. D., Bluchill

As in previous years, the dentists have been most generous making dental examinations, giving rates, etc. The teachers and nurses have arranged clinics, and service clubs have paid for work for needy children. In previous years when jobs of all sorts were more plentiful, children were able to earn money to pay for their own work. For the past two years, in many rural communities, the dental work was made possible through the combined efforts of the teacher and pupils. They put on plays, drives, sales, etc., to earn the money. In one town \$150.00 was raised. A school in a remote section earned \$35.00, and all but one of the children had all the necessary dental corrections. At another rural school, two years were spent in earning the \$65.00 with which to make the school 100%. Two of the pupils in this school had bridge work which was paid for from this fund.

In 1927-28, when the Better Teeth Campaign was launched, five rooms reported 100% corrections and 35 rooms reported

50% dental corrections. The number of 50% and 100% rooms have increased each year until in 1933-34 we are proud to report 86 100% rooms and 546 50% rooms.

In 1933 there was an increase of 13½% in the 100% rooms.

In 1934 there was an increase of 31½% in the 100% rooms.

In 1933 there was an increase of 42% in the 50% rooms.

In 1934 there was an increase of 19% in the 50% rooms.

The cities and towns showing a substantial increase are as follows:

50% Rooms	1933	1934
Portland	93	109
South Portland	3	15
Waterville	4	16
Augusta	8	15
Rumford	5	12
Brunswick	7	10

At the suggestion of Miss Florence Hale, a representative of the Good Teeth Council for Children came to Maine in February. She complimented us on the soundness of the Good Teeth Campaign — sound because so many children are helping to earn the money to pay for their corrections and are going long distances to visit the dentist.

Respectfully submitted,

GERALD P. CLIFFORD, D. D.,
Chairman.

Report of School Health Education Service—January 1 to July 1, 1934

Introduction

To the Board of Directors and Executive Committee, members and friends of the Maine Public Health Association, as Director of the School Health Service of your organization, I hereby submit my eleventh annual report for the school year of 1933-34.

Health Habit Activity

The Health Habit Charts are being used

in approximately 95% of the School Unions, and the teachers report better results each year, 914 schools qualifying for the awards.

Six and Seven Point Child Activity

The Six and Seven Point Child Activity continues to be successful, not only in the cities, but in the Unions of towns and in many of the island school systems.

The activity starts in January and closes the first of December. Children having corrections made during the summer will receive the 1934 certificates and pins all during the fall — up until December first. Approximately 25,000 pupils have already met the Six and Seven Point requirements and have received the 1934 certificates. Owing to the difficulty in getting money to pay for necessary corrections, we did not anticipate having such a large number of children who would meet the Seven Point requirements this year, so we ordered a smaller number of pins than last year. Before schools closed our supply was exhausted. The pupils who did not receive them will get their pins when schools open in the fall.

Blue Ribbon Schools

In 1933 the Red School (Rural Training) at Farmington reported 100% Seven Point pupils and asked for some special recognition. We decided to call a 100% Seven Point school a Blue Ribbon school and to award the school a blue ribbon bearing a gold seal and an appropriate inscription. Before December last year, six more schools had qualified, making a total of seven Blue Ribbon schools, six of which were in Franklin County and one in Aroostook County.

Since the first of January, 1934, 16 Blue Ribbon schools have reported. Four of these schools—the Red School, Farmington; Greenville School, Sandy River Plantation; Starbird Corner School, Freeman; and the McIntosh School, Fort Fairfield—were Blue Ribbon schools last year. Washington County reported the largest number this year, six in all. Eight more schools will get the Blue Ribbon award in the fall, making a total of 24.

Better Teeth Campaign

We are glad to be able to report — as we have every year since the Better Teeth Campaign was started — a substantial increase in the number of children having all the necessary dental corrections.

Bangor reported more corrections than any city system in the State. Thirty-eight rooms had 100% dental corrections as compared with 23 in 1933.

Forty-four rooms reported 50% dental corrections. Four rooms lacked only one child each of being 100%. The Abraham Lincoln School of 20 rooms, 540 pupils, reported 89%, and the Mary Snow School of 17 rooms, 500 pupils, reported 95%.

The Western Avenue School, Waterville, four rooms, 120 pupils, lacked only three of having 100% dental corrections.

The Haacker School, Fort Fairfield, four rooms, 170 pupils, reported for the fourth year 100%. The second and fourth grades in this school have had 100% for six consecutive years. The McIntosh School, also of Fort Fairfield, has had 100% for three years.

Washington County reported the largest increase in dental corrections of any county in the State. Twelve rooms are 100% and 55 rooms 50% as compared with 23, 50% rooms, in 1933.

Union 91 (Bluehill, Brooklin, Sedgwick) reported 16 of the 30 schools with 100% and 10 of the 30 schools with 50%. This is the largest increase in any School Union.

Brewer, Rockland, Camden, Mechanic Falls, East Machias, Dexter, Mexico, Houlton, Jay, Wilton, Ellsworth, Winslow, Old Town, Old Orchard, all reported a substantial increase.

Contests

The contests include the Health Story Contest and the Health Poster Contest for High and Junior High Schools, the Teacher-Pupil Health Activity Contest for grades, the object of the contests being to promote a health program in the upper grades and to improve the school housekeeping in all grades.

No award was made in the Health Story Contest.

The Hawthorne School, Embden, Miss

Madeline Parks teacher, earned the award in the Teacher-Pupil Health Activity Contest.

More high schools entered the Health Poster Contest than during any previous year. The prize winners were as follows:

First prize, Robert T. Lowell, Lincoln Junior High School, Portland.

Second prize, Loraine McGee, Jordan Grammar School, Lewiston.

Third prize, Alice Haley, Woodland School, Woodland.

Program for 1934-35

The plan for the School Health Program for 1934-35 is as follows:

1. The Health Habit Activity through the use of the Health Habit Chart.
2. Correction of defects through the use of the Six and Seven Point Child Activity and Better Teeth Campaign.
3. The Story, Poster and Teacher-Pupil Health Activity Contests.
4. A plan for developing units to promote all phases of the dental program (dental corrections, nutrition, exercise and diet).

Conclusion

The success of the School Health Program in a year when it was never more difficult to get money to pay for corrections shows how well grounded the program is. Through the leadership of the superintendents, the generosity of the doctors and dentists, the untiring work of the school nurses and teachers, and the coöperation of the parents and pupils, the good work goes on from year to year.

To all the people and agencies with whom it has been my good fortune to work over a period of years, I wish to express my appreciation and gratitude.

Respectfully submitted,

ABBIE M. BUCK,
Director School Health Service.

Report of Tuberculosis Committee—July, 1933, to July, 1934

The Clinical tuberculosis work of the M. P. H. A. was begun in the smaller Maine towns without hospital out-patient advantages, and was coördinated with the county medical societies to be of mutual advantage to the poor who were otherwise deprived of specialist diagnosis, and to the doctors in receiving expert consultation on each case. These clinics were increasingly successful and popular in demand. About five years ago, following the urge of the National Tuberculosis Association for the detection of childhood tuberculosis and inspired by reports of case-finding in the Chadwick Clinics in Massachusetts, we initiated the work of the school survey. The plan carried out is as follows:

The clinic nurse has made the necessary contact with parents, school officials and physicians, has done the tuberculin tests, has taken X-ray pictures of positive reactors which have been developed by hospitals, sanatoria, and in Portland by voluntary assistance of private laboratories. One physician, Dr. Forrest B. Ames, who is connected with the Eastern Maine General Hospital, has interpreted all X-rays. Those children thus showing demonstrable disease have had a complete physical examination by one of a group of state tuberculosis specialists, who has explained each child's condition to the parents present at the examination and conferred with the family physician present. It is to the honor and credit of the medical profession that all of this professional work has been gratis, and in the course of years has represented a very great contribution in time and expense. The Maine Medical Association has until this year contributed \$400.00 a year to help pay for X-raying. The Maine Public Health Association has met the expense of a portable X-ray machine, a car, services of a stenographer, X-ray films, tuberculin and incidentals. Although faced with a diminishing income this past year, the tuberculosis clinical service has met an even greater demand. Our Association can consider this a compliment to the pioneering

which has made the towns of Maine eager to have this program carried through. We should naturally take a justifiable pride in the success of our Association, and we know we have accumulated a mass of material and facts in regard to school children and the sick of the State of Maine, the evaluation of which should be given to the public. The data thus obtained should be carefully preserved.

Results: 1. About 20,000 school children have had tuberculin tests, a sufficient number to show the incidence of tuberculous infection in Maine, so that comparison may be made with other states.

2. Children needing treatment have been discovered and advice given so as to avoid the more serious adult type of disease.

3. Sources of infection have been discovered. It has been possible to find out where an infected child got his infection, and to identify the individual who infected the child. Following such discovery the child has been removed from further contact; the adult has been advised and perhaps placed under treatment, sometimes in a Sanatorium.

4. The clinics have given in a very desirable way the publicity necessary for the control of tuberculosis. They serve very well to educate the school children and their parents, the school officials, the medical and nursing profession. The simple facts of tuberculosis without controversial questions have been carried to the parent by the child.

"People are not yet educated to seek advice in regard to tuberculosis until there is some obvious sign of disease, yet it may be discovered years before one's health has suffered sufficiently to lead him to a doctor. Schools offer the most easily accessible groups, and investment here yields the largest return. It is obviously unfair to limit the discovery of childhood tuberculosis to the localities who can pay the bills. This means a state-wide survey. Re-examination should be made at intervals, as family physicians are handicapped without X-ray examinations, impossible because of expense. The free examination of sputum by the State has for many years been valuable in confirming advanced

tuberculosis, but it is now recognized that X-ray examinations are of greater importance in the discovery of tuberculosis, and that in many cases this would be financially impossible.

The increasing demand for school surveys requires a full-time clinic physician. As advance work, he should continue to contact the county medical association, the school board, the board of health, to thus assure their cordial coöperation and interest. He should then meet the superintendent of schools and the teachers and arrange an address to the students in order to prepare and to prevent undue alarm. Then the request forms should be sent out to parents. The clinic itself should be planned to rapidly complete the work in order to relieve over-anxious parents and demonstrate system and efficiency to the public. There should be a painstaking search for every source of infection, and a consultation with each patient's family physician, even if such physician had not been present at the clinic, and have a record of follow-up work at dates advised.

Recommendation: That as the Maine Public Health Association has made so great a contribution to the people of the State of Maine in preventive tuberculosis work, and has already established such a valuable work in school survey, the work itself must be continued, even if the income of the Association does not allow it to incur the expense involved. To discontinue any of this work would be a step backward in tuberculosis control. A full-time clinic physician should be secured to systematize the work, to unify it, and meet the increasing demand. This action must be state-wide and not sectional. In the absence of sufficient contribution or return from seal sales, we must turn to the State to provide the funds for its protection against tuberculosis and for carrying on the work in which we have made an honorable and valuable record."

The report to this committee from the Supervising Nurse is so good that I am quoting it in full, with her well-expressed wish that the identity of the Maine Public Health Association should not be lost:

"The following recommendations are based on the need of an adequate budget: We need funds for a full-time Clinician with adequate salary and expense allowance for travel; funds to meet expenses of X-rays, developing tanks and fluids, and all necessary material used in conduction of such Clinics; a full-time stenographer and technician with provisions for an adequate expense account for travel. This would release funds now being used for materials for the clinics so that the Maine Public Health Association might furnish two nurses, thus providing a better follow-up on our clinics. This is either not being done at all or at its best is being poorly done. I would further recommend that the Clinician be made Director of the Clinic Program, that bookings for Clinics still be made through the M. P. H. A., that Clinician's headquarters be in that office, and that the nursing service for this program, as at present, be supplied through the Public Health Nursing Staff of the M. P. H. A., these nurses to work wholly on the Clinic program and as assistants to the Clinician in formulation of his program."

We second and adopt her report.

Some especially praiseworthy and efficient work has been done in Portland this year, due to a very sympathetic school committee which is represented by Dr. Cleveland. We were given the enthusiastic support which merited public approval. 5500 of our school population in schools which totalled 6200 were tuberculin skin-tested. Of these 573 reacted and were X-rayed. Demonstrable evidence of disease was apparent in 56, who were examined at school clinics by tuberculosis specialists. Three children were sent to sanatoria; three were given home treatment bed-rest; of the remainder, lesions in the lungs were pointed out to parents, future care impressed for the danger of relighting healed lesions, and a majority received directions for enforced rest period. This school survey in Portland, through vivid presentation by Dr. Wakefield to every student, awakened the interest in the value of stopping the beginnings of tuberculosis. It has done more to teach tuberculosis in Portland than years of literature or medical advice. The efficiency

of Mrs. Marian Oakes helped very greatly in rapidity and accuracy.

As this organization is in a state of emergency due to financial loss of its large givers and lowered returns from Seal Sale, we ask the appointment of a state clinician for the prevention of tuberculosis in hospital clinics and in field work, and that he be authorized to accept the assistance of the Maine Public Health Association till legislative enactment can be secured for the use of funds accumulated in tuberculosis state work.

TUBERCULOSIS CLINIC COMMITTEE,

By: CHARLES B. SYLVESTER, M. D.,
Chairman.

Report of Supervising Nurse

To the Executive Committee, Directors, Members and Friends:

I hereby submit my report for the period beginning July 1, 1933, and ending June 30, 1934.

While the duties of the "Big Three," the executive staff — Miss Buck, Mrs. McGouldrick and myself — are more or less interlocking, there are certain activities which are definitely my responsibility. I refer to Public Health Nursing, State-wide Clinic Program, certain Sections and Special Programs.

Public Health Nursing

We close our fiscal year with 22 Public Health Nursing Services carrying on active programs. Seven of these services develop their own programs and are affiliated only for their percentage of returns of seal sale. Fifteen receive active Nursing supervision from the Maine Public Health Association. These are the services which have been organized since the Maine Public Health Association has furnished supervision.

Classified as to types, we have 3 Tuberculosis Services — the Clinic, devoted wholly to case finding, one in Augusta and one in Lewiston; 1 School Nursing Service in Milloocket; 2 local Associations in East Milloocket and Skowhegan; 4 County Services

in York, Piscataquis, Franklin and Hancock Counties; and 5 Services with headquarters in Wilton, Winter Harbor, Southwest Harbor, Dexter and Bluehill, respectively, each of which serve 3 or 4 towns and are designated as Joint Services. These joint services provide a general program, including bedside nursing.

More than 22,000 of our people brought their health problems to these nurses during this past 12 months: in the homes of the ill giving bedside care, talking with mothers about their babies, and the much needed teeth and throat corrections for the school children; transporting patients to hospitals and sanatoria; visiting schools; interviewing town officials for aid for deserving patients; and in serving as consultants for every new Federal Aid project being developed this year, they have met the test for coöperation.

A new service is being opened in Lewiston, known as the Androscoggin Anti-Tuberculosis Association. A nurse has been employed for two months for follow-up in connection with a program conducted in the Public and Parochial Schools. This work is sponsored by an active Doctor's Committee. We shall continue this service on a full-time basis beginning January 1, 1935, providing there is sufficient budget provided through Seal Sale Returns.

The Augusta Tuberculosis Prevention Service was temporarily discontinued because of lack of funds, but this Service will be resumed again beginning November, 1934. We hope that we shall have an adequate budget to carry on for a year after the above date.

Tuberculosis Clinic Program

Since July 1, 1933, we have carried programs in Portland, Lewiston-Auburn, Belfast, Bangor, Lubec, Rumford-Mexico, Gardiner, Boothbay Harbor, Norway, Bluehill, Biddeford-Saco, Sanford and Rockland. Mrs. Oakes, the Clinic Nurse, has given over 15,000 Tuberculin Tests and taken 1,371 X-rays — no small task when we consider technique and precision involved.

The weaknesses in our present clinic program are basically due to inadequate budget. Too long a time elapses before final examination clinics and the placing of the report in

the hands of the family physician. This means loss of interest on both the part of the physician and patient. We need nurses to follow up our clinics, whose sole responsibility will be to see the family physician to discuss cases examined with him and to assist in securing family coöperation in following the clinicians' recommendations. For example of what avail is our clinic, if Johnnie Smith is found to have active childhood tuberculosis and the Clinician recommends rest, fresh air, good food, no athletics and another X-ray soon, if these recommendations are to be carried out, aren't there several people to see about Johnnie? The doctor, Superintendent of Schools, his teacher, the Athletic Coach, father and mother, and lastly, Johnnie needs to be talked to. What avail is a diagnosis, if we leave it at that? At present all we can do in regard to follow-up is to use local facilities. If it is not well done, there is nothing that the Maine Public Health Association can do about it. However, we do at definite intervals offer return follow-up clinics. We have not encouraged requests for clinics for the coming year, but we have to complete the screening program in Portland as soon as School opens and preliminary arrangements are made for school screening in Bath. Requests are also filed for Dixfield, Sanford and Bar Harbor.

Special Activities

1. Woodman Audiometer. The Woodman Audiometer was the gift of the late Mrs. Eleanor S. Woodman of Winthrop to the Maine Public Health Association for use in testing the hearing of school children. By September, this past year, every day of the school year was booked for its use. Over 6,000 pupils were examined for defective hearing in 25 cities and towns. No charge, of course, was made for its use. We have found over 300 with a hearing loss. Again it becomes a responsibility of the nurse to stimulate interest in a medical examination for the child, so that if the case is remedial, steps may be taken for treatment.

2. Early Diagnosis Campaign. The Early Diagnosis Campaign in April this year had a new name, Health Recovery. The slogan

"Tuberculosis Robs You — Public Health Protects You" was stressed in the ten broadcasts which Dr. J. L. Pepper of Portland and Dr. H. D. McNeil of Bangor made possible on their broadcasting time. The Women's Federation also were generous to us, and through Mrs. Lena Day of Gorham and Mrs. Dick Young of Bangor, our friends broadcasted on Health Recovery for us several times. Generous use of special pamphlets on tuberculosis was made in pay envelopes of Industries. Distribution of pamphlets was also made through the Public Libraries of the various towns.

3. Health Programs. Well-Baby Conferences in coöperation with Farm Bureaus, Health Exhibits, Classes in Home Hygiene, Health Talks and free loan of Films are types of Educational methods we have used in general with the public in teaching right attitudes toward Health.

Sectional Activities

After our Early Diagnosis Campaign this year a certain physician interested in Cancer Prevention wrote me saying, "Why don't you educate folks regarding cancer? Almost the same slogans are applicable as those you have used in your Tuberculosis Prevention Campaign." This question is a challenge, and this year we hope to do more in regard to teaching prevention of this disease. Plans are being made to have a Cancer Committee Conference to see what can be done through a preventive educational program. There is a great need of emphasis being placed on early contact between the physician and patient if lives are to be saved.

Mental Hygiene is another one of our Sectional Activities. About the only thing done this year has been meeting requests for literature and providing speakers for special meetings. That the extensive survey conducted under the leadership of Dr. Charles Dickinson, head of the Department of Psychology at the University of Maine, has borne fruit is surely demonstrated in the following incident: After talking before a group of young mothers recently on Mental Hygiene, the promoter of the program said to me, "I asked you for this subject because you asked me

in your Mental Hygiene Questionnaire a few years ago 'What our Community was doing for its young mothers in teaching right habit formation in early childhood'."

Then there is the problem of Heart Disease Prevention, which Dr. Drake, our Section Chairman on Heart Disease Prevention, would so much like us to do something about.

Over 300 cases of Infantile Paralysis have been found through our recent Survey. We need to demonstrate the value of follow-up on these cases. A request for a specially trained worker was filed with the Federal Relief Administration Office for Maine at the State House, but this project was not approved. Therefore, children still go home from the hospitals with much-needed braces and appliances properly fitted by skilled physicians and ignorant parents immediately remove them because, in their opinion, the child does not walk as well as it did before the child went to the hospital.

This is only one of the many ways in which such a worker would be of help. From an economic standpoint alone they would save the State many times their salary. However, much is being done through our nurses, but the above comments apply to those huge rural areas which a county or State nurse only sees in an emergency or at least once or twice a year. All coöperation possible is being rendered through home supervision and provision of transportation facilities to and from hospitals.

My gratitude and appreciation goes to all of our Executive Staff with whom I work, to the office staff, the doctors, and our friends everywhere. To them goes my loyalty and desire to give the best in Service.

Respectfully submitted,

THERESA R. ANDERSON, R. N.,
Staff Executive.

Maine State Department of Health and Welfare, Bureau of Health

NUMBER OF DEATHS, *BIRTHS AND NOTIFI- ABLE DISEASES REPORT FOR MONTH OF JUNE, 1934

Births	1137
Rate	17.16
Deaths	800
Rate	12.00

Counties	Births	Rate	Deaths	Rate
Androscoggin	102	17.16	76	12.84
Aroostook	185	25.32	74	10.08
Cumberland	191	17.04	135	12.00
Franklin	24	14.40	18	10.80
Hancock	44	17.16	34	13.32
Kennebec	118	20.04	69	11.76
Knox	26	11.28	31	13.44
Lincoln	12	9.24	10	7.80
Oxford	48	13.92	27	7.80
Penobscot	150	19.44	99	12.84
Piscataquis	17	10.80	13	8.52
Sagadahoc	17	12.00	21	14.88
Somerset	43	13.20	49	15.00
Waldo	26	15.36	34	20.16
Washington	51	16.20	32	10.20
York	83	13.68	78	12.84

NOTIFIABLE DISEASES

Diseases	Deaths	Diseases	Deaths
Influenza	15	Tuberculosis, all forms	24
Pneumonia	72	Typhoid Fever	3
Scarlet Fever	1	Whooping Cough	7
Syphilis	1		

* Stillbirths not included.

166 births too late for last report.



The President's Page

TO THE MEMBERS OF THE MAINE MEDICAL ASSOCIATION:

If proof is needed to establish the value of much of the reading matter in the publications of the American Medical Association, it is to be found in the fact that last year one out-of-State collection agency stole \$30,000.00 from Maine physicians, and another \$55,000.00 although the JOURNAL and the *Bulletin* have cautioned us repeatedly against signing any collection agency contract. This is a high price to pay for failure either to subscribe to A. M. A. publications or to read them, having paid the large sum of \$7.00 for A. M. A. Fellowship, less than two cents a day.

Within six months the *Bulletin* has quoted the Association's Bureau of Economics as stating, "If one is to make any inference from the number of collection agencies in the field which devote a portion or all of their time to medical collections, it would seem that the collection of medical accounts has offered a fairly attractive field for the commercial agency. There are on file in the Bureau of Medical Economics, records of 1,112 commercial agencies striving for some share of the medical retail accounts." Despite such information to be had by being a member of one's State Medical Association, plus the sum of two cents a day for the JOURNAL and the *Bulletin*, one still finds doctors signing contracts with these crooked agencies.

About one and one-half years ago, the President of the Board of Directors of one of the hospitals in this State was approached by a certain "high-powered" salesman, representing one of these nefarious outfits. He explained that he had a very efficient collection system. For the sum of \$240.00, to be paid in monthly installments of \$20.00 each, he would collect \$5,000.00 for the hospital. At this point he presented a contract for the President's signature. In the course of his talk, the visitor gave a long list of names of "medical men" who had purchased his service, and, at his suggestion, the President telephoned one of them—a local doctor—who said that he (the doctor) considered the contract as good as a gold bond for \$5,000.00. Upon this unsound advice, two contracts for \$5,000.00 was signed, thus obligating the hospital to pay \$480.00 for this service. With these contracts tucked away in his pocket, Mr. Collector returned to his native heath. However, one month later he reappeared, full of collection advice and of "many good prospects for money very soon," adding that the price of collections was about to be increased and that this was the "last day to get in on the \$240.00 figure." The President, ever alert to grasp unusual opportunities, promptly signed another \$5,000.00 contract.

Ten months later, Mr. President called at the Boston office for a report and some money, only to learn that his signature on the contracts closed the accounts to his investigation and that he would have to await the company's pleasure for a report.

Subsequent analysis of this shrewd scheme disclosed the following facts:

1. The client obligated himself to pay, on a promissory note, the amount of \$240.00 *on each contract*, and the consideration he received in return was nothing but a promise to send a dun to his creditors. As there was no commission, there was no incentive to collect. No reports or remittances were necessary unless the creditor was in good standing, and who knows when a client is in "good standing?"

2. The client in each contract signed a separate negotiable instrument that could be collected upon by a bona fide purchaser for value, regardless of any defence the client might have for fraud, etc. Probably few if any clients think of having the notes cancelled and returned, when paid. In that case, there is nothing to prevent them being transferred and *collected again*. In other words, since three \$240.00 notes were given, even though all had been paid, there would remain the obligation to pay all three again, unless they had been surrendered.

Having got into such a predicament, what was the remedy? A bill in equity, known as a Bill Quia Timet, had to be filed, demanding surrender or cancellation of the notes. The accounts turned over could be withdrawn only on penalty of breaching the contract. The amount collected could be recovered by a suit at law, where collection could be proved, *after deducting the amount of the notes*.

Surely, it is only the negligent and unthinking who would allow themselves to become involved in an agreement of that sort, yet it is almost a daily occurrence.

DON'T SIGN NOTES OR CONTRACTS WITH ANY COLLECTION AGENCY. Be a member in good standing of your State Medical Association and subscribe to and read the JOURNAL and the *Bulletin*, in order not to become the prey of financial vultures, if for no other reason. The means are at hand for a song, whereby you may be spared the humility of being fleeced out of your hard-earned cash if you will but avail yourselves of them. Read daily the "President's Page" in the July number of the STATE MEDICAL JOURNAL. It was written for your benefit—not for mine.

Don't be a consummate ass for the sake of saving a few paltry dollars.

"A fool and his money are soon parted."

E. W. GEHRING.

Abstracts

"The Disturbances in Vision and in Visual Fields After Ventriculography"

By C. B. MASSON, M. D. *Bull. Neurol. Institute of New York*, Vol. 3, June, 1933, Page 190.

The author studied one hundred consecutive cases. Six cases of temporary blindness occurred. Three of the patients had normal fundi; in the others there was papilledema of two to four diopters. The pressure of the fluid in the ventricles ranged from 160 to 220 mm. One patient had marked reduction in visual acuity before ventriculography was done. In the other five vision was normal or only slightly reduced. Two of the patients had marked visual field defects before the procedure. Three cases showed increased intracranial pressure. In two patients the loss of vision occurred during the manipulations incident to introduction of air, and in the other four vision began to fail from two to sixteen hours later. Four were operated on during the blind period and in them the loss of sight averaged forty-five hours. In the two not operated on, the blind period lasted about twenty-three hours. All regained the visual acuity which they had had before the manipulation. No satisfactory explanation for this complication is found.

H. F. H.

"Treatment of Lateral Sinus Phlebitis, Thrombosis and Otitic Septicemia with Non-Specific Immuno Transfusions"

ERSNER-MYERS

Laryngoscope, May, 1934

Encouraging results have been reported from the use of specific immuno transfusions in the treatment of septicemia. Stephenson used non-specific immuno transfusions in a case of hemolytic streptococcus septicemia with recovery. Following this report the authors have treated two cases in like manner successfully. A suitable typed and cross-agglutinated donor was given intravenously one-tenth cc. of stock typhoid vaccine, containing fifty million killed organisms. Seven hours later the patient was given 100 cc. of whole blood from the donor and sixteen hours later 100 cc. more which had been citrated and refrigerated. Another similar transfusion was given four days later. This was followed by an immediate drop in temperature and a favorable change in the Schilling index, with a beginning shift to the right. There was never any severe reaction to the transfusions. Wright's statement that, "We should discard the confident, dogmatic belief that immunization must be specific," should be carefully consid-

ered. The ease of this method and its apparent value make it worthy of trial.

F. T. H.

"Poliomyelitis"

(Results of treatment in the acute disease; Analysis of Reports on 4,400 treated with serum; Observations on 2,660 untreated patients)

By PAUL H. HARMON, M. D., Chicago

From the Department of Surgery, Division of Orthopedics, the University of Chicago, *A. J. of Dis. of Child*, June, 1934, Page 1216

In this second of two reviews of various phases of serum treatment in poliomyelitis, the author has presented with thoroughness and great care the results of several reports made by different workers in the United States and Europe. He has collected data concerning 5,060 patients and arranged them in illuminating tables. With an "average mortality of from 10 to 15 per cent. in epidemic years" and a "social disability of residual paralysis, the more severe grades of which occur in from 25 to 50 per cent. or cases in certain epidemics," the gravity of the disease is apparent. Due consideration is given to the "uncertainties" of disease, variations in epidemics, differences in techniques of administering the serums, ages of patients and orthopedic after-care. Four serums are discussed, namely: Antistreptococcus serum, of Rosenow, Nazum and Willy, normal "human" serum and the antiviral animal serums developed by Pettit and others.

Although the reports do not present statistical evidence in favor of any particular serum, clinical observations have been made "almost universally" "of rapid symptomatic response to the administration of serum by an immediate drop in temperature and marked improvement in symptoms." The author believes the clinical results cannot be totally disregarded. He does not find evidence to support any other form of therapy except spinal drainage, and in conclusion states: "More data are needed before it can be said conclusively that serum of any form is totally without value. There appears to be enough evidence from clinical observations to warrant the continued use of serums in early stages of acute poliomyelitis."

T. A. F.

"Avertin Anesthesia in Normal Persons"

ARNHEIM AND TUCHMAN

Archives of Surgery, July, 1934

The constitutional effects of avertin anesthesia upon fifteen presumably healthy individuals were

studied by the authors. The solutions were prepared and administered according to the manufacturer's directions. These patients were hospitalized for relatively minor surgical procedures, such as hernioplastics, but no surgery was undertaken prior to the completion of the recorded data. No preliminary medication was employed to vitiate the significance of the observations, nor was any supplementary anesthesia employed.

In summary the effects of avertin anesthesia without complicating surgery, medication or supplementary anesthesia are expressed in the following observations:

An average increase in the pulse rate of 16 per minute and in the respiratory rate of 6 per minute.

A decrease in the amplitude of respiration and 1.3° F. in the rectal temperature and in the systolic blood pressure of 24 mm. and in the basal metabolism of 22 per cent and in the clotting time of three minutes.

A slight early rise in the blood sugar, a slight fall in the carbon dioxide content of the blood and a slight rise in the plasma volume.

A negligible change or no change in the venous pressure, blood cholesterol and cholesterol ester, blood calcium, blood chlorides and formed blood elements.

Slight oliguria and an increase in the specific gravity of the urine.

Loss of the conjunctival and tendon reflexes, with a late preservation of cutaneous and pharyngeal reflexes.

Slight cyanosis in two instances, increase in the secretion of mucus in the pharynx in five instances and slight vomiting in three instances.

C. H. J.

"Aluminum Silicate (Kaolin) with Aluminum Hydroxide in Certain Intestinal Disorders"

W. A. SWALM, Philadelphia

Medical Record, July 4, 18, 1934

This article is based on a year's research in Temple University. The patients were those afflicted with diarrhoeal disorders, both functional and organic, and other functional colon disorders. Both kaolin and aluminum hydroxide have been known to exert very beneficial effects — the former as an adsorptive and filtering agent against bacteria and suspended matter in fecal suspension, and the latter as an antacid through an adsorptive action. A combination of these two has now been prepared, that is, a suspension of kaolin in aluminum hydroxide gel. Clinically, this remedy has been used in the following types of disorder: idiopathic ulcerative colitis, amebic colitis, intestinal tuberculosis, psychogenic diarrhoea, achylia, duodenal ulcer, hyperacidity, fermentative diarrhoea. Sixty-five cases were studied, and all improved but nine. This kaolin-alumina mixture is not considered a curative agent but rather as an adjunct to the usual therapeutic measures employed. It has been demonstrated that a definite amelioration of both subjective and objective clinical manifestations is produced. Cramps, distention, nausea, vomiting, and acid eructations are relieved. The bowel state is improved, especially with regard to excessive motility and formation of stools.

D. H. D.

"Reports on the Use of Dinitrophenol"

American Medical Journal, Vol. 103, No. 4,

July 28, 1934

Recently there has been an increasing number of cases in which dinitrophenol was employed for reduction of weight. Under proper direction this has been a comparatively safe treatment. Dinitrophenol has been dispensed with increasing frequency by druggists who have no conception of its potential dangers when unwisely administered, and in some instances by lack of careful medical observation. For these reasons cases of dinitrophenol toxicosis have recently occurred.

S. Stephen Bohn, M.D., Ann Arbor, Mich., reports a case of agranulocytic angina following the use of dinitrophenol. The patient had lost twenty pounds by dietary measures, then began using dinitrophenol in dosage of 4-8 mg. per kilo of body weight daily. Within a week there appeared urticarial eruptions on the arms. This spread until at the time of admission to the hospital the entire body was involved. The white blood count was 1,150 per cc, with a differential of 80% lymphocytes and 20% endothelials. The patient recovered in ten days, following a blood transfusion on admission and the immediate institution of penicillin therapy.

Dr. Nathan Sidel, Boston, reports a case of dinitrophenol poisoning causing jaundice. This patient suffered a similar urticarial reaction after two weeks' ingestion of the drug, with jaundice developing at the time of hospital admission. The drug was discontinued and the patient placed on a high carbohydrate and low fat diet, supplemented with ten units of insulin. With this treatment the patient showed a gradual improvement and clearing of the symptoms, at the time of the author's report.

Edward Matzer, M.D., San Francisco, attempted to determine whether sensitivity to dinitrophenol could be indicated by skin tests. The four common methods were used, namely: the patch test, the scratch test, the intradermal test and the passive transfer test. These were given to 157 cases and in every instance a negative response was elicited, despite the fact that one was known to be sensitive at the time while three others were found to be sensitive later.

Comment: Dinitrophenol (according to Cushing) can be used in reduction of obesity by the speeding up of the body metabolism. The dosage recommended is from 3-5 mg. daily per kilo weight. A 20%-30% increase in metabolic rate is noted after the first hour and maintained for twenty-four hours.

J. G.

"Internal Haemorrhoids"

August Surgery, Gynecology and Obstetrics

"In an attempt to compare the value of operative and injection methods in the treatment of internal haemorrhoids, the author sent a questionnaire to 293 proctologists in America, Great Britain, France and Germany. Fifty-seven replies gave definite information. Of these, 49 came from America.

The survey shows that in 36,648 cases treated by operation there were 11 deaths, whereas in 26,262 cases treated by injection there were no deaths. Haemorrhage followed operation in 0.573 per cent. of cases, and followed injection in 0.279 per cent. of cases. Stricture occurred in about 0.22 per cent. of the cases treated by operation and in none of

those treated by injection. After the use of injection methods, recurrence developed in at least 15 per cent. of the cases within three years. Sloughs occurred in about 1.09 per cent. of the cases treated by injection."

N. C. B.

"Cholelithiasis"

August Surgery, Gynecology and Obstetrics

"While cholecystectomy is the procedure most widely used to-day in the treatment of cholelithiasis, it is often followed by persistence of the distress. The author therefore believes that in uncomplicated cases the procedure of choice is cholecystendysis, i. e., removal of the stones from the gall bladder followed by resuture of the organ. This operation is of advantage over cholecystectomy because it is easily performed, its mortality is lower, it does not cause injury or stricture of the common duct, and it is not followed by dilatation of the bile passages or changes in the parenchyma of the liver.

Three hundred and forty-one cases in which cholecystendysis was performed with good results are reviewed.

The author advises cholecystectomy for stenosis of the cystic duct, carcinoma, gangrene and perforation."

P. A. R.

County News

Hancock County Medical Society

The August meeting was held at the Shore Club, Bar Harbor, Maine, on Wednesday night, August 15, 1934.

At 8.15 P. M. the meeting was called to order by the president, Dr. George A. Neal of Southwest Harbor, Maine.

Minutes of the last meeting were read and approved.

Routine business was transacted.

Program:—

(1) "Traumatic Surgery"—by Dr. John Moorehead, New York.

This paper was practical, wittily and cleverly presented, and contained a wealth of timely facts invaluable to any and all practicing physicians of the present day.

A limited discussion followed.

(2) "Sub-acute and Chronic Broncho-pneumonia and Its Relation to Disease of the Upper Air Passages"—by Dr. David Riesman, Philadelphia.

A clear, concise and clever presentation of factors in upper respiratory disease as related to sub-acute and chronic broncho-pneumonia.

Discussion followed, in which many of the members present participated.

At 10.30 the formal meeting ended, all gathered in the main dining-room, where a light buffet lunch was much enjoyed—and at 11.45 was adjourned one of the most practical meetings of the Society in recent years.

Tentative plans were made for a joint meeting

with the Penobscot County Medical Society to be held at Lucerne-In-Maine on Tuesday night, September 11, 1934.

Thirty-six physicians and one guest were present.

R. E. WEYMOUTH, M. D., *Sec'y.*

Somerset

At the Annual Meeting of the Somerset County Medical Association, held August 3, 1934, the following officers were elected:

President, Dr. W. S. Milliken, Madison.

Vice-President, Dr. F. P. Ball, Bingham.

Sec.-Treas., Dr. C. A. Moulton, Hartland.

Delegate to 1935 Annual Meeting of M. M. A., Dr. O. J. Caza, Skowhegan.

Alternate to 1935 Annual Meeting of M. M. A., Dr. C. A. Moulton, Hartland.

Board of Censors and Program Committee, Drs. F. E. Earle, Canaan; H. E. Marston, No. Anson; Geo. E. Young, Skowhegan.

Member of Auxiliary Legislative Committee, Dr. C. A. Moulton, Hartland.

C. A. MOULTON, *Secretary.*

Washington

The regular August meeting of this Society was held in Calais on August 24th in the St. Croix Hotel.

Drs. B. L. Bryant, J. L. Johnson and T. S. Moise of Bangor presented a symposium on "Thoracic Disease." This subject was well handled and well received. General discussion followed.

Dr. J. L. Johnson, President-Elect of the Maine Medical Association, addressed the meeting relative to medical acts and the Legislature.

Twelve members and nine visitors were present.

Dr. J. A. McDonald of East Machias invited the Society to hold its next meeting at his cottage at Gardner's Lake.

P. J. MUNDIE, M. D., *Secretary.*

Books Received

Test Tube Babies—a history of Artificial Impregnation by Dr. Herman Rohleder. The Panurge Press, 70 Fifth Ave., N. Y. Price \$3.50.

Medical Magazine Cuttings and Notes

The International Assembly of the Inter-State Postgraduate Medical Association of North America will be held in the Public Auditorium, Philadelphia, Pennsylvania, November 5-9, 1934. Many distinguished teachers and clinicians will appear on the program. A major list of the names of the contributors to the program, with other information, appears on page IX of this JOURNAL. All members of the Maine Medical Society are cordially invited to attend. Registration fee of \$5.00 admits all members of the profession in good standing.

Although very late in the day, we are commending the attractive and instructive paper by our colleague, Dr. George O. Cummings, on his paper regarding "Foreign Bodies in the Food and Air Passages," and not only for the skill exhibited in their successful removal but for the very lucid and, at the same time, very instructive pictures printed alongside the literature. They add greatly to the value of the material body of the paper. Our readers should turn to this clever article once in a while, looking for it in the March number of the JOURNAL for the year 1932.

Foreign Notes

A full term extra-uterine pregnancy with a living child is reported in the *British Medical Journal* of July 14, 1934, by Dr. Arkeley Steel.

In the same issue is a note on the examination of the Renal Function in which the writer urges that chemical examinations in the laboratory should never alone be used to bear the labor and responsibility of making a proper diagnosis. The writer's little book on this opinion can be found neatly reviewed in the July 14 issue of the *British Medical Journal*.

Seven hundred mad dogs and cats, seven hundred in number, were shot in Great Britain after having bitten a large number of people. Seven hundred mad dogs and cats, the figure given out officially.

The pedal cyclist, as called in foreign lands, is held responsible in a very large majority of road motor accidents. Interfering with travel, they are highly dangerous to foot passengers as well as to passengers in motor cars.

A bright example of medical charity is reported from England in the case of an English practitioner who was cut off from his labors by a hopeless attack of blindness. The profession enlisted in his behalf and sent him ten thousand dollars. With that he purchased a life annuity and invested the other half. This was at the age of 47. The generosity of the profession in this way helped him and his family for more than twenty years, and he has lately died. The Royal Benevolent Fund now gets part of his invested fund, and shows how our kindly charity well invested does good work for a long series of years.

The Maine General Hospital Bulletin

No. 1 for July, 1934, has been handed in to us and we note with pleasure cases of Suppurative Pericarditis by Dr. Carl Robinson, Metastasis to the Bone in Hodgkin's Granuloma by Dr. L. T. Thaxter, Prevention of High Insulin Doses in Diabetes Mellitus When a High Carbohydrate Diet is Used by Dr. E. R. Blaisdell.

Some fifty gallons of alcohol and a very considerable amount of excellent liquor seized by the law in Kennebec County were given to a local Hospital in Waterville on August 16th.

The tenth course of Graduated ante-natal and post-natal care of the Virginia Medical Colleges began July 19th and will continue ten weeks, embracing five towns. The preceding courses had enrolled 594 physicians. The enrollment fee was

\$5.00, whilst \$6,000 was granted by the State Medical Society and grants from the Commonwealth Fund to the amount of \$16,000.

The 1934 Medico-Military Symposium for Medical Department Reserve Officers of the Army and Navy will be held at the Mayo Clinic from October 7th to 20th, inclusive. The morning hours will be devoted to attending clinics on subjects selected by the student officers, and afternoon and evening hours given over to work in Medico-Military subjects.

The general motif of the Symposium will be "Public Health and its Relation to National Defense." Application should be made either to the Corps Area Surgeon, Seventh Corps Area, Omaha, Neb., or to the District Medical Officer, Ninth Naval District, Great Lakes, Ill. The invitation to accept this course of study without charge is extended by the Mayo Clinic. The project is without expense to the Government, and the one hundred hours' credit will be given to those who take and complete the course.

Dr. Jamieson of Portland has favored us with items of medical news from Great Britain, from which we learn of decreases in disease, increases in health, fewer deaths, and more and better houses and lower house rents for the working people. Much, however, remains to be done and the physicians are doing everything possible to complete their share. When working people make more wages the doctors earn perhaps less, but they get paid what is due for their services. Ante-natal clinics and infant welfare centers are doing great work in keeping down disease and mortality. Overcrowding is, however, still a national calamity, and a famous cause for infection and extension of epidemics. Voluntary sterilization of the unfit is much talked of and is gradually arriving to become a national creed, but we still have need to give no offense to the national conscience.

Finally, there has been of late years a tremendous slum clearance campaign. There had been a national boom in building small houses, but rents were still not low enough and on the whole were excessive compared with the price of other necessities of life.

We thank our veteran, Dr. Dunn of Portland, for the very handsome gift of the formerly missing volumes of transactions of the Maine Medical Association.

The magazines of today often print items of value to the people as well as to the profession, and amongst recent papers of value we note in the *Atlantic* for November the case against State Medicine. Theoretically much can be said for it, but when every reader can find out for himself that this State Medicine business has proved a failure in every nation embracing it, why not take a careful look at its results abroad before unloading it upon us? The one great argument is the obedience which it obtains for the doctors. Interference destroys the personal relation between patients and medical friend.

Let us try Russia, where doctors get \$12 a month for six hours a day and some of them work for \$24 a month at twelve hours a day. A doctor must have time for mental rest in order to be of value to his clients. As editor, we suggest that these writers practice medicine as we have for sixty years and still enjoy the clientage and friendship of their first patients and their descendants.

INTERNATIONAL MEDICAL ASSEMBLY



Inter-State Postgraduate Medical Association of North America

Public Auditorium, Philadelphia, Pa. NOVEMBER 5-6-7-8-9, 1934

Pre-Assembly Clinics, November 3rd; Post-Assembly Clinics, Philadelphia Hospitals, November 10th

President, Dr. John M. T. Finney, President-Elect, Dr. Charles H. Mayo,
Chairman Program Committee, Dr. George Crile, Managing-Director, Dr. William B. Peck,
Secretary, Dr. Tom B. Throckmorton, Director of Exhibits, Dr. Arthur G. Sullivan,
Chairman Philadelphia Committees, Dr. Frederick J. Kalltayer

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Charles R. Austrian, Baltimore, Md.
W. Wayne Babcock, Philadelphia, Pa.
Lewellys F. Barker, Baltimore, Md.
Edward L. Bauer, Philadelphia, Pa.
Arthur Dean Bevan, Chicago, Ill.
P. Brooke Bland, Philadelphia, Pa.
Harlow Brooks, New York, N. Y.
Ralph C. Brown, Chicago, Ill.
Hugh Cabot, Rochester, Minn.
James T. Case, Chicago, Ill.
R. B. Cattell, Boston, Mass.
Henry A. Christian, Boston, Mass.
George Crile, Cleveland, Ohio
Elliott C. Cutler, Boston, Mass.
Walter E. Dandy, Baltimore, Md.
Vernon C. David, Chicago, Ill.
John F. Erdmann, New York, N. Y.
John M. T. Finney, Baltimore, Md.
John R. Fraser, Montreal, Canada
Charles H. Frazier, Philadelphia, Pa.
J. Claxton Gittings, Philadelphia, Pa.
Ross Golden, New York, N. Y.
Perry G. Goldsmith, Toronto, Canada
Evarts A. Graham, St. Louis, Mo.
Roscoe R. Graham, Toronto, Canada
R. L. Haden, Cleveland, Ohio
William D. Haggard, Nashville, Tenn.
George J. Heuer, New York, N. Y.
Thos. B. Holloway, Philadelphia, Pa.
Emile F. Holman, San Francisco, Calif.
Campbell P. Howard, Montreal, Canada

Chevalier L. Jackson, Philadelphia, Pa.
Elliott P. Joslin, Boston, Mass.
E. Starr Judd, Rochester, Minn.
Frederick J. Kalltayer, Philadelphia, Pa.
Louis J. Karnosh, Cleveland, Ohio
Floyd E. Keene, Philadelphia, Pa.
Edward J. Klopp, Philadelphia, Pa.
Frank C. Knowles, Philadelphia, Pa.
John A. Kolmer, Philadelphia, Pa.
Frank H. Lahey, Boston, Mass.
Dean Lewis, Baltimore, Md.
Fielding O. Lewis, Philadelphia, Pa.
Warfield T. Longcope, Baltimore, Md.
William E. Lower, Cleveland, Ohio
William P. Lucas, San Francisco, Calif.
Willis F. Manges, Philadelphia, Pa.
Charles H. Mayo, Rochester, Minn.
William J. Mayo, Rochester, Minn.
Joseph F. McCarthy, New York, N. Y.
James H. Means, Boston, Mass.
George B. Minot, Boston, Mass.
John J. Moorhead, New York, N. Y.
George P. Muller, Philadelphia, Pa.
Emil Novak, Baltimore, Md.
Robert B. Osgood, Boston, Mass.
Ralph Pemberton, Philadelphia, Pa.
O. H. Perry Pepper, Philadelphia, Pa.
William C. Quinby, Boston, Mass.
Fred W. Rankin, Lexington, Ky.
William F. Reinhoff, Jr., Baltimore, Md.
David Riesman, Philadelphia, Pa.
Leonard G. Rowntree, Philadelphia, Pa.

Alfred Stengel, Philadelphia, Pa.
Cyrus C. Sturgis, Ann Arbor, Mich.
Robert G. Torrey, Philadelphia, Pa.
Waltman Walters, Rochester, Minn.
Allen O. Whipple, New York, N. Y.
Hugh H. Young, Baltimore, Md.

FOREIGN ACCEPTANCES TO DATE:

Dr. Roberto Alessandri, Prof. of Clinical Surgery, Medical Dept., Royal University of Rome, Rome, Italy.
Dr. A. Mario Dogliotti, Prof. of Clinical Pathology, Royal University of Turin, Turin, Italy.
Dr. Hans Guggisberg, Prof. of Gynecology, University of Berne, Berne, Switzerland.
Dr. Paul Strassmann, Prof. of Obstetrics and Gynecology, University of Berlin, Berlin, Germany.

TENTATIVE:

Mr. A. Lawrence Abel, F.R.C.S., Surgeon Cancer Hospital, London, Eng.
Prof. Mario Donati, Head of Dept. of Surgery, University of Milan, Milan, Italy.
Dr. Ferdinand Sauerbruch, Prof. and Head of the Dept. of Surgery, University of Berlin, Berlin, Germany.

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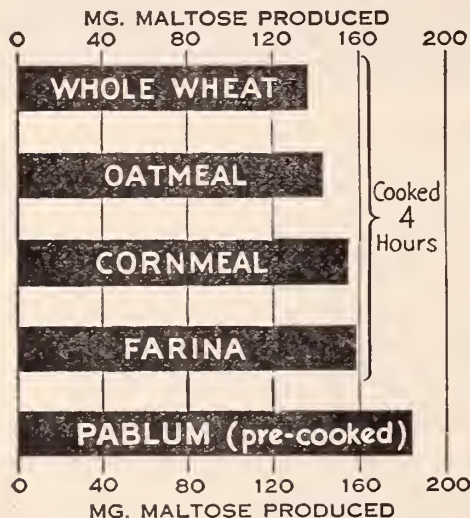
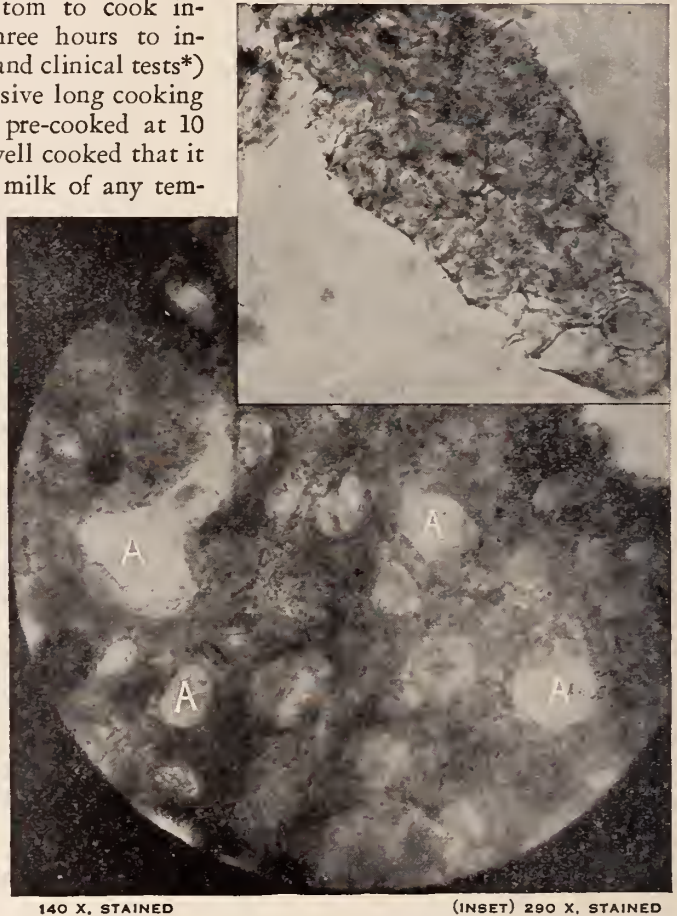


*Chart shows that maltose production is much greater for Pablum prepared with cold water than for other cereals cooked 4 hours. Ross and Burrill (*Journal of Pediatrics*, May 1934) conclude from this and from the total soluble carbohydrate formed that starch digestion of Pablum is more rapid than that of 6 other cereals.

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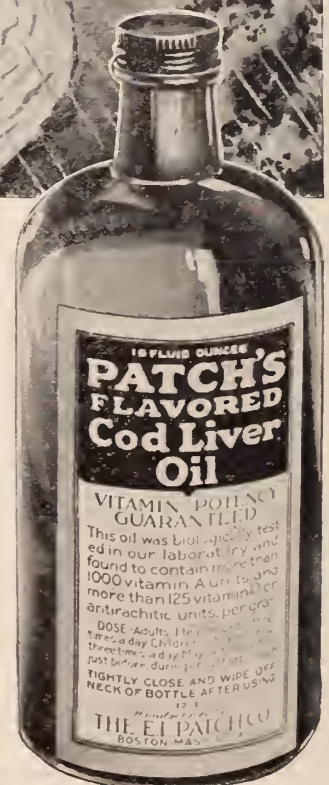
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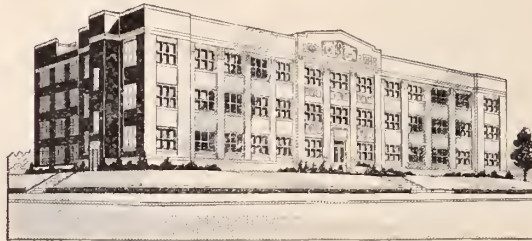
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Maine Medical Journal

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Portland, Maine, October, 1934

No. 10

Editorials

Learning to Swim

The frequent instance of drowning of young people and one especially unfortunate and tragic in the drowning of the young son of one of our Portland representative families recalls the imperative need of young people of both sexes learning how to swim. Having been taught this very useful and life-saving accomplishment in our native city, we felt urgently moved by these recent disasters to discover the means of teaching young people of Portland how to save their lives and the lives of their friends unable to swim. For this purpose we made a careful visit of late to the swimming tank in the Boys' Club in this city. Accompanied by a most courteous attendant, we walked safely downstairs and up again and were rewarded by finding a most attractive tank for learning how to swim. Of small depth at one end it grows deeper in the middle and end, for the purpose of learning how to dive, and all around are means for introducing fresh water and something to grab in case as a beginner you are frightened by fear of drowning. There is no doubt that with a competent instructor this cemented tank is something better than good, it is a marvelous gift to the boys and girls of Portland who have a chance to learn how to save their own lives and the lives of friends threatened with drowning.

Since beginning this brief editorial we recall at our home of years gone by a swimming tank in the course of a tidal river with slats below and on four sides through which the salt water from the ocean flowed abundantly. With the tank thus formed we learned how to swim in salt water and to rescue friendly drowning boys and soon got accustomed to swallowing large gulps of cold salt water without losing our hold on a pretended sinking playmate. Lives have been lost after apparent rescue by the life-saver getting salt water in his mouth and losing hold of the person whom he was in a friendly fashion saving from being drowned.

May it be Portland's good fortune in another summer to be provided by some wealthy friend with a tank open to the sea salt water, both for teaching how to swim and how not to lose hold of a drowning friend from unaccustomed mouthfuls of cold salt water.

The Hospital Staff Meeting

There is probably no type of medical meeting which varies so much in the style and manner in which it is conducted in different localities as the hospital staff meeting. One has only to visit a few of our own hospitals in the state to verify this statement.

This variation may be due, in part, to the individual preferences of certain hospital groups, to customs and habits of long standing, and to the fact that, in many cases, efforts to hold real staff meetings are a comparatively recent development. The College of Surgeons insists that all approved hospitals hold monthly staff meetings and outlines certain matters that shall be included. To a varying degree this suggested procedure is adhered to. Nevertheless, it is easily apparent that there is a great difference in these meetings. Some are of extreme value, while others appear to be merely formalities, something that must be carried out but with little expectation (and consequently little realization) that it will benefit anyone. This is unfortunate, as there is probably nothing of greater potential value to any medical group than a well-planned and conducted staff meeting. It should be made so interesting and instructive that staff members would look forward to the meeting night with pleasure and anticipation, not allowing anything to interfere with attendance. Any active hospital has plenty of interesting material which can be utilized for the scientific improvement of the profession. There is many a lesson in the case history carefully studied and worked up.

Too often much of the time at a staff meeting is taken up with routine business, which would be better conducted by committees. Except for a brief period for necessary reports, etc., the entire time should be devoted to the scientific part of the program. This should consist of a careful audit of the professional work of the hospital for the period covered by the meeting. This should be carefully planned by the chairman or a program committee. The work of the hospital should be analyzed, and those cases meriting reporting should be included on the program. This program should be completed and posted one or two days in advance, to enable the members having reports to prepare them. Needless to say, all deaths should be included, as well as cases which may not be making satisfactory progress. Frankness and honesty should be the keynotes of these presentations. Cases should be reported snappily, with all non-essential features omitted. Five minutes should suffice, on the average, for each case

report. Nine or ten interesting case reports are better than many routine ones, but any member should be free to call up the discussion of any case in the hospital he may feel warrants it. There should be free and frank discussion, which should be kept within due bounds by the presiding officer. Criticism should be fair and constructive. The pathologist and roentgenologist, especially, should be prominent in the discussions. With a program selected intelligently and after careful study of the available material, the staff are not only reviewing the work of their group, but are engaging in case teaching. The program committee should select the cases so as to distribute them among the different staff members, especially encouraging the younger men, giving them the opportunity and practice of reporting cases, as well as seeing to it that there is sufficient variation in types of cases so that everyone will find something that interests him particularly. Subsequent reports on the progress of especially interesting cases should be asked for. An innovation that can be included at times is to call for reports of cases that have previously been on the program, say a year before, to note the progress made. Too often we neglect a proper follow-up on cases and lose interest in them after they leave our care. Many a case which has been reported as perfectly successful might show a different result if checked up a year hence. As a rule, statistics should be avoided. Emphasis should be upon clinical features. It does no one any good for a man on service to merely report that he had done so many appendectomies, so many herniotomies, etc.

Much depends upon proper stage management. Everything should be in readiness, display box, X-ray films, specimens, etc. Nothing will kill a meeting quicker than delay, due to lack of foresight. But with proper preparation, both of program and accessories, worth-while meetings can be carried out in any hospital. Such meetings regularly held throughout the year will do a great deal to improve the work and stimulate the interest of the staff members, bringing joy and pleasure into what too often seems to be necessary drudgery.

F. T. H.

Inter-State Postgraduate Medical Assembly

The International Medical Assembly of the Inter-State Postgraduate Medical Association of North America will take place in the Public Auditorium of Philadelphia, November 5, 6, 7, 8, 9, 1934, with clinics before and after in the Philadelphia hospitals. The programs have been chosen for both the general practitioner and specialists. The Philadelphia Medical Society will be host to the assembly. All members of the profession in good standing are heartily invited to attend and special railroad rates will be in effect on all lines.

The program contains some seventy odd ad-

resses and diagnostic clinics from leading lights in the profession, mostly from Boston, New York, Philadelphia, Rochester and San Francisco, whilst Europe will be represented by leaders from Berlin, London, and Rome.

There will be daily intermissions for review of exhibits and a convention dinner with addresses by distinguished speakers of world-wide reputation.

It is hoped that members of the Maine Medical Association will make a special effort to be present at one or all of the tempting programs so abundantly offered. In our September issue of the JOURNAL one may find on page IX a list of members of the profession who will take part on the program.

**Continuous Drainage in the Treatment of Cerebrospinal Infections and Report of Cases*

By L. H. SMITH, M. D., Winterport, Maine.

I believe that during the past two years an entirely new chapter has been written into the treatment for infections of the cerebrospinal system. Heretofore, we have had only one specific therapeutic agent, the antimeningococcic serum, and that for the meningitis caused by the meningococcus intercellularis. The cases of cerebrospinal inflammations caused by other pyogenic bacteria and viruses have far outnumbered those cases of infections caused by the meningococcus, and upon finding these cases the prognosis is exceedingly grave. Since a change in treatment has been attempted the outlook, though still grave to be sure, is a bit more encouraging and the mortality rate definitely decreased. Even now with this radical change in treatment, the mortality rate is high, yet from the results obtained it has been shown that a more reasonable assurance may be given, and a greater number of cures effected than before.

Kubie and Retan in their very illuminating paper, *The Journal of the American Medical Association*, July 29, 1933, leave little to be said, and I have no idea of contributing more evidence than their article gives. I

wish, however, to re-emphasize some important points in their article, and to encourage this particular method of treatment.

There is little, if any, doubt that the cerebrospinal fluid is formed by the choroid plexus which are highly vascular fingers projecting into the cavities of all the ventricles. They are the largest in the lateral ventricles. These vascular tubes are covered by a layer of epithelial cells which are a modification of the ependymal lining of the ventricles. The cerebrospinal fluid passes from the lateral ventricles through the foramen of Monroe into the third and fourth ventricles, and out through the foramina of Luschka and of Morgagni into the subarachnoid space, both cerebral and spinal. There is considerable evidence both experimental and clinical of this statement.¹

Hypotonic salt solution introduced into the general circulation causes a transient increase of venous pressure and a marked and prolonged rise of cerebrospinal pressure. This is due to differences in osmotic pressure causing a passage of fluid into the brain substance and out into the perivascular and subarachnoid spaces. Foley² has shown that the in-

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jection of a hypertonic solution reverses the normal direction of the cerebrospinal fluid.

The normal pressure within the closed cavities or spaces of the cranium and spine is greater than the atmospheric pressure.

Forced drainage then consists of two steps: first, the reduction of intracranial and spinal pressure to atmospheric pressure in order to make the intracranial conditions of fluid production conform to those of the rest of the body that there may be an active participation of all the capillary bed. Second, the dilution of the blood stream by the introduction of a hypotonic salt solution into the general circulation.

Under these conditions not only is the formation of the cerebrospinal fluid accelerated from the choroid plexus, but also by active transudation from the capillaries of the parenchyma throughout the brain and spinal cord. The fluid thus formed courses along the perivascular channels until it reaches the subarachnoid space and then emerges from the body through the drainage tract which has been provided. This has been proven by Kubbie and Schultz.

One of the phenomena of inflammation is the increased permeability of the capillary walls at the site of infection and a greater filtration of fluid from the blood stream; this is as true of the meninges as in any other part of the body. In cases of inflammatory conditions elsewhere, coincident with an infection of the cerebrospinal system, it might be inadvisable to use a hypotonic salt solution especially if the inflammation is of the bronchial tubes for fear of a pulmonary edema, or if the infection is of some closed cavity incapable of being drained.

In carrying out the treatment, a Bradford frame is used which either rests upon the bed on its own ends which are turned down, or if straight, the ends are placed upon blocks of wood. The head should be from 5 to 8 inches higher than the foot, and it is necessary that the frame be high enough from the bed that the needle may be manipulated, or that a syringe may be attached to the needle to make suction should its lumen become occluded with fibrin or exudate. Two pieces of canvas are tightly drawn on the frame, the pieces being separated by a few inches where the lumbar region of the patient will rest.

The lumbar puncture is performed at the ordinary site with a large needle, the patient lying on his side with knees drawn up and spine flexed as much as possible. When the needle is in the subarachnoid space, the pressure may be determined, and specimens of the fluid collected. The stylette is reinserted and the knees and back are slowly straightened out, and the patient is slowly turned upon his back with the needle projecting down between the pieces of canvas. The stylette is removed and the fluid allowed to drain into a receptacle. Should there be a failure of the fluid to escape, the needle should be pushed in a little farther, for in the straightening out of the body there is an increase in the depth of the tissues holding the needle sometimes as much as one-fourth of an inch.

The spinal fluid is allowed to drain until there are only a few drops each minute, and if the rapid drainage produces a severe headache the flow should be checked and ice caps applied to the head. After relief is obtained the flow should be re-established.

Our limited experience has been, however, that instead of causing a headache that the headache which has been a constant complaint since the beginning of the disease is within a short time greatly relieved. Were there no other benefit from the treatment than the relief of the headache, it would well warrant the procedure. In draining the cranial and spinal cavities until only a few drops escape per minute, the pressure within these cavities becomes nearer to, or may be equal to, the atmospheric pressure.

A hypotonic salt solution is now started by vein, and with the average sized adult no less than a liter should be given, care being taken that the solution is kept as near as possible to body temperature, and that the flow is continuous. One liter may be given in an hour; if more of the solution is used as 2 to 3 liters, three hours should be a reasonable time for administration.

For safety to the patient and convenience to the operator, a 0.45% solution is usually used as a lower percentage might cause a hemolysis of the red blood cells, and before using a lower percentage the fragility of the R. B. C. should always be determined. For each liter we have always used 500 c. c. of a

normal saline solution to which is added 500 c. c. of distilled water.

This hypotonic solution upon entering the general circulation causes, as I have stated, an increase of intracranial pressure, and then by osmosis a passage of fluid from the deeper brain substance into the subarachnoid space. This provides a continuous lavage of the inflamed tissues, a dilution of accumulated toxins, and possibly aids in mobilizing antibodies.

The spinal fluid is now allowed to drain continuously and fluids are forced by mouth. If 3 liters can be ingested by mouth in each 24 hours, it may no longer be necessary for further administration of the hypotonic solution, since when the direction of the flow is well established, it is easily maintained.

At first, the spinal fluid cells may be increased as they are poured out into the subarachnoid space from the deeper tissues. If possible the causative organism should be recovered early, for as the drainage continues, they become fewer in number, and disappear entirely. This may explain our failure in case 3 to obtain a positive Guinea-pig inoculation.

• The period of drainage depends entirely upon the response to treatment, and the approach of recovery. In the periods that we have used, the drainage has been from 3 days to 4 weeks. If desired, the drainage may be discontinued for a few hours, then again instituted.

In cases where there is delirium and extreme restlessness and the patient cannot be controlled, or only with great difficulty, it may be inadvisable to drain with the needle. Then a laminectomy is done on a lumbar vertebra, and drainage is maintained by means of a rubber drain or catheter.

During the disease, supportive treatment, of course, is always given, the patient is made comfortable with sedatives or opiates, and special care given to the back and buttocks to prevent excoriations and bed sores.

The space between the frame and bed may be inclosed by blankets to prevent drafts and a chilling of the patient. An electric bulb may be placed upon the bed beneath the frame to keep the patient's back warm. This treatment offers no difficulties and is easily carried out.

The involvement of the meninges by bacteria or viruses is always of serious moment and one which should be hospitalized if possible. Circumstances might arise making it impossible for hospitalization. In such cases, I think this treatment may be carried out in the home. The construction of a suitable frame would offer the greatest difficulty, but a plumber or carpenter could well meet the emergency. Every physician should be equipped with a clysis set and now it is possible to obtain normal saline solution and sterile water in 1 liter containers from most of our supply houses.

The principal indication for the use of this treatment in our hands has been for the pyogenic infections. There have been reports of rather brilliant results also in poliomyelitis, encephalitis, chorea, multiple sclerosis and cerebrospinal syphilis. The only important contra indication as stated, is that, it should not be used when there is an associated inflammatory condition of any other closed cavity incapable of being drained.

These cases which I am presenting are only a part of those treated during the past two years at the Eastern Maine General Hospital. One case of streptococcal meningitis ending in recovery gives a somewhat better prognosis than could hitherto have been given.

I acknowledged my appreciation to Dr. Knowlton, who has cared for these cases with me, and whose enthusiasm about the treatment was an incentive for its early use. I also wish to thank Dr. Goodwin for allowing me to present one of his cases which I saw in consultation.

We have treated two cases of poliomyelitis, one of which I am presenting. At the time of treatment, we did not feel that any benefit was obtained, possibly on account of two reasons. First, the patient was not seen until paralysis was well established, and second, that an insufficient amount of hypotonic salt solution was used. Encouraging reports have been made of cases seen early and vigorously treated.

CASE I

W. A. Male — Age 39 — Hospital No. 56709.

Admitted to Hospital Oct. 5, 1932.

Complaint: Pain and weakness in both legs.

History: One week before he had sudden pain in stomach which was followed by frontal headache, later becoming occipital. Twenty-four hours later his neck became stiff. The following day his legs became progressively weaker until he had very little use of them.

The flexors of the thighs were particularly affected.

Knee and ankle reflexes were gone.

Temperature was normal and remained so.

Pulse varied from 78 to 105.

W. B. C. 10,000, R. B. C. 4,900,000.

Spinal fluid pressure 190 mm. water, and there were 40 cells per cu. mm.

Globulin + + + +, spinal fluid sugar increased.

50 mg. ephedrine was injected intraspinally twice daily for the next five days.

On Oct. 11, 1932, continuous spinal drainage was started and 2,000 c. c. Hypotonic salt solution given intravenously. The patient was encouraged to ingest as much fluid as possible. The first day he took 97 oz. and the amount on the following days was nearly the same. Immediately after the treatment was started the patient stated that he was a great deal more comfortable and that he had more strength in his weakened muscles.

Unfortunately, no date of discontinuing the treatment was charted.

Patient discharged Oct. 20 with instructions to family physician regarding care of weakened muscles.

CASE II

F. W. Age 56, Married — Drug Salesman—Hospital No. 58485.

Patient admitted to Hospital April 15, 1933, after having been ill several days with a bad cold and enteritis.

Temp. 100, pulse 70, W. B. C. 7,500, R. B. C. 4,600,000, Hb. 69%.

Diff. polys 69%, Lymphocytes 27%, Eosinophiles 1%, Monocytes 3%.

Urine: Slight trace of albumin and once showed 0.2% sugar, blood Wasserman and Kahn: negative.

Widal: negative; throat culture showed mixed growth of staphylococci and streptococci.

The patient's condition began to change and grow worse on the third day. I saw the patient with Dr. Goodwin on the 19th. He was very restless, turning from side to side and complaining of headache, his head slightly retracted and neck very stiff. There was a paralysis of the left deltoid muscle, pupils: small and equal.

Reflexes: Biceps, triceps, abdominals, cremasterics were present. Knee jerks were absent, a positive Babinski on right side.

Spinal puncture gave a slightly yellowish tinged fluid under increased pressure, 2,000 cells per cu. m. m.

Globulin + + + + many grams positive cocci in smear and the culture developed staphylococcus aureus.

A laminectomy was performed by Dr. Silsby, and 3,000 c. c. hypotonic salt solution given intravenously.

The patient was not able to drink much fluid.

The following day 2,000 c. c. Sol. given.

The next day 2,200 c. c. Sol. given.

The next day 2,200 c. c. Sol. given + 50 gram glucose.

The following day 2,300 c. c. Sol. given.

The patient did not drain well at times and considerable manipulation of the catheter was necessary. No estimation could be made of the amount of drainage.

Restlessness and pain were controlled by sodium amytal and morphia.

On the 7th day of drainage, caffeine sodium benzoate gr. 7½ were given q. 4 hours.

On the 8th day he was digitalized with hopes of buoying up his failing condition which continually grew worse and he expired on the 9th day after treatment was instituted.

CASE III

A. R. Female—Age 16 years—Hospital No. 60034.

Admitted to Hospital Sept. 22, 1933.

Complaint: Stiff neck and headache.

P. H.: About July 1st began having swelling of joints and fever, and diagnosed as rheumatic fever. After one month in bed this condition subsided and patient was up and about the house. After a few weeks this condition returned and she has been confined to bed since. About one week ago began having

headache, stiffness of neck muscles, and the condition has grown progressively worse. On Sept. 21 she became delirious and vomited.

Upon admission she was rational and co-operative.

Both upper eyelids were swollen and red.

Both tonsils moderately injected.

Neck markedly resistant; and there was much pain on attempted flexion.

Heart slightly enlarged to the left and there was a rough systolic murmur over pre-cardium transmitted to axilla.

Its rate 120: Temp. 103.8, Resp. 26, Cheyne-Stoke's in character, abdomen was tense over entire surface.

Extremities: no paralysis evident but there was a weakness in the grips of both hands, more marked on the right.

A weakness in flexors of both arms more marked on right, Kernig's negative.

Reflexes: Biceps and radial reflexes bilaterally absent, abdominal reflexes absent.

Plantar reflexes present and equal: Babinski +.

Lumbar puncture: fluid was ground glass in appearance.

Initial pressure 275 m. m.

Jugular compression on either side gave pressure 325 m. m.

50 c. c. spinal fluid was withdrawn.

Spinal fluid: 850 cells per cu. m. m., Globulin + + + +.

No bacteria found, and culture grew, no growth, sugar .015.

Two days later a guinea pig was inoculated—a pellicle formed in spinal fluid after twenty-four hours.

Spinal fluid was Wasserman positive, later becoming negative.

Gold solution test gave a curve corresponding to that of T. B. meningitis.

On Oct. 9th, acid fast bacilli were found in several clumps.

On Oct. 24, cells were 19 per cu. m. m., globulin +, sugar .09%.

No bacteria found in smear, and culture negative.

Autopsy of guinea pig the 18th of Nov. showed no pathology.

Urine: positive for diazetic acid and acetone.

Blood: W. B. C. 17,800, R. B. C.

3,440,000, Hb. 80%, Polys 81%, Lymphocytes 19%. Wasserman: negative.

Sept. 30th: W. B. C. 18,200, 72% polys, of which 53% were nonfilament in type, sedimentation time of R. B. C. was 25 minutes.

On Oct 20th: W. B. C. 9,100, R. B. C. 4,210,000, Hb. 92% and sedimentation time 70 minutes.

X-ray of lung fields showed no pathology.

On Sept. 23: 1,000 c. c. hypotonic salt solution were given by vein and continuous drainage started. The drainage was continued until Oct. 17. During the entire time copious amounts of fluids were given by mouth and a high caloric diet urged.

Immediately upon beginning the treatment the patient felt better and within 72 hours there was a noticeable improvement in her condition. Her recovery was constant and she was discharged Oct. 30th. I have had regular reports from her and she is in apparent good health.

CASE IV

W. S. Age 22, Married—Laborer—Hospital No. 59756.

Admitted to Hospital Aug. 28, 1933.

Sometime in the summer he consulted Dr. Harry Johnson because he was seeing double and after a blood test he was referred to Dr. Harrison Hunt for antilenetic treatment. After several treatments he had a rash over entire body and he lost all his finger nails and toe nails. For past few days had had a persistent headache and had been irrational for a few hours previous to admission.

His wife is receiving antilenetic treatment at this time. His physical examination at the time was negative, except that his pupils were irregular and only reacted slightly to light and accommodation. There was considerable rigidity of the neck and back. There was no muscular tenderness or paralysis, and reflexes present and equal.

His admission temp. was 99.2 and remained practically normal during his stay.

Pulse 60 and average rate was 80.

Respirations were always slow.

W. B. C. 8,600, polys 76%, lymphocytes 24, Hb. 81%. R. B. C. 4,200,000.

Lumbar puncture gave a fluid under great pressure. The cell count was 237 per cu. m. m., mostly lymphocytes.

Globulin +, sugar 0.05. No bacteria found in smear, and culture showed no growth, Wasserman: negative.

Gold Sol. 1-1-1-1-2-2-2-1-1.

He received repeated lumbar taps until he was placed on continual drainage, Sept. 12th. He was immediately relieved of his distressing symptoms as headache and vomiting, and his right pupil which was nearly twice the size of his left became normal in size. With the hypotonic solution and forced fluids by mouth, the amount of spinal fluid drainage was from 20 to 30 oz. each day. Occasionally, the flow would stop due to a plugging of the needle. Headache and dilation of right pupil would immediately follow and this condition was rectified as soon as the drainage was re-established. Many times this patient feeling a headache in the night would feel the end of the needle. If the fluid was not escaping, he would push the needle in a short distance or until he felt with his finger the fluid dropping, his relief would be immediate and he would fall asleep.

His progress was satisfactory, and with a decreasing cell count. On the night of Sept. 30th, he pulled the needle out, turned over and went to sleep. During this time he had also been treated with iodides and tryparsamide.

His convalescence was speedy and uneventful until Oct. 10th when he was taken with a right sided hemiplegia and a weakness of the internal rectus muscle of left eye. He re-

gained some of the use of his right side, especially of the leg, and was discharged Oct. 30, 1933, with instructions to report back for examination in a short time.

He came to my office twice in November. There was a gradual improvement. After that Dr. Knowlton treated him in his office. He was quite ataxic and had a pronounced weakness of shoulder girdle.

Summary: The use of this treatment is justified,

1—By actual demonstration that with a decrease of intracranial and spinal pressure, and the introduction of a hypotonic salt solution into the general circulation there is a continuous lavage of the brain tissues into the perivascular and subarachnoid spaces resulting in a washing out of bacteria, a dilution of toxins and possibly a mobilization of antibodies.

2—The decrease in the mortality rate in cerebrospinal infections.

3—The immediate relief of headache and discomfort. This treatment is deemed inadvisable when there is an associated inflammatory condition of any closed cavity incapable of being drained.

NOTES: ¹ Dandy and Blackfan, *American Journal of Children's Diseases* 1914, vol. VIII, pp. 406-482.

Dandy, *American Surgery* 1919, vol. IXX, p. 129.

² Foley, *Archives Neurology and Psychiatry* 1921, vol. V, p. 744.

**Concerning Diagnostic Problems in the General Country Practice*

By F. H. BADGER, M. D., Winthrop, Maine.

To my mind the subject of Diagnosis deals with the most vital essential of successful treatment of physical or mental impairment.

As practitioners of our profession in the rural districts we are often required to make a reasonably correct diagnosis within a reasonable length of time and often, too, in some isolated spot without the use of modern laboratory equipment such as is always within easy reach of our brothers of the

urban centers. Therefore it behooves us of the country so to equip our mental laboratories from the resources of that greatest of all teachers, experience, that we shall need later the diagnostic laboratory and X-ray only to confirm our mental calculations.

Diagnosis means more than a mere naming a disease. It demands such accurate subclassification and intelligent, painstaking individualization, as necessitates a knowledge of etiologic factors, the nature and sequence

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of pathologic changes, the effect of age, occupation, residence, habits, heredity, past ailments and even the constitutional peculiarities and personal characteristics of the individual.

Accurate diagnosis is a pre-requisite to accurate prognosis and effective treatment. Many complex cases are encountered in which several ailments are concurrent and the obvious diagnosis may not represent the lesion of chief importance in the given case. Hasty conclusions are damaging in most instances and their frequency tends to emphasize the rule that all examinations must be thorough and complete and that the discovery of one important condition must not close the mind to other possibilities.

The true end and aim of modern scientific diagnosis must be the earliest possible recognition of any disease either acute or chronic, and the promptest feasible institution of an effective treatment.

Patients today, too, demand much more than they did formerly. They want thorough examinations, performed with speed, and they also want the latest view on every subject about which they consult you.

It has been said that the best way to study diagnosis is to carefully observe patients, from the data collected draw inferences about the pathological changes that are present and then to witness the verification or correction of these inferences at autopsy. That is all very well for physicians connected with large hospitals where autopsies are frequently performed, but the doctor in the country practice rarely has the opportunity to see post-mortems on the patients he has attended. This is a serious handicap to our post-graduate education. This lack of autopsies which make possible the check on diagnosis and the correction of errors is hard to supply. Dr. Dean Lewis, President of our National Association, in a recent article read before the Annual Congress for Medical Education, Licensure and Hospitals, and published in a March issue of the *Journal of the A. M. A.*, advocates that a ward should be set aside in general hospitals for the doctor of the urban districts to which he might send his patients requiring hospitalization. Such a ward could be properly supervised through the staff. The doctor would retain his patient and work in such a

ward would give him an opportunity to work out the sort of diagnostic education thus outlined.

Dr. Osler once said that, more perhaps than any other professional man, the doctor has a curious sensitiveness to, what he regards, personal error. In a way this is right, but it is too often accompanied by a cocksureness of opinion, which, if encouraged, leads him to so lively conceit that the mere suggestion of a mistake under any circumstance is regarded as a reflection on his honor, a reflection equally resented whether of lay or professional origin. Start out with the conviction that absolute truth is hard to reach in matters relating to our fellow creatures, healthy or diseased, that slips in observation are inevitable, that errors in judgment must occur in the practice of an art which consists largely in balancing possibilities. Start out with this attitude of mind and mistakes will be acknowledged and regretted, but instead of a slow process of self-deception, with ever increasing inability to recognize the truth, you will draw from your errors the very lessons which will enable you to avoid their repetition.

A great source of diagnostic error in chronic ailments, and who of us has not made them, may be briefly expressed by the statement that we do not take or are not granted the time indispensable to do good work. There is evident still that same tendency to seize upon that which is obvious and guess at that which is obscure, which, in times past, found its sole justification in lack of available knowledge and instruments of diagnostic precision. The unravelling of a tangled skein of symptoms in an *obscure* case means more than the work of any one day perhaps, and may demand a more or less prolonged period of observation.

In medicine more than in surgery diagnosis demands a sufficiency of facts truthfully recorded, intelligently sifted and viewed without bias or prejudice.

That old maxim, "For want of a nail the shoe was lost"—etc., down to the loss of a kingdom, "all for the want of a horse shoe nail," is well illustrated by those cases of petty ill health which are often overlooked but may make life a burden to the otherwise healthy individual. Too often the laity and,

I am sorry to say, some of us physicians also look upon these morbidities as common to mankind. To-day, however, the up-to-date general practitioner, whether in country or city, as well as the specialist, realizes the deeper significance of such slight physical disabilities. Therefore, I repeat that hasty conclusions are most often damaging.

Frequently you will hear a physician in reporting a case of diagnostic error say that he did not at first get all the facts of the history or that he failed at first to make a urinalysis, or a blood examination, any one of which might have revealed the one thing necessary to establish a far different but nevertheless correct diagnosis.

Our knowledge of clinical symptoms in a given case depends upon what we are told and what we see or determine for ourselves, that is, they are either subjective or objective, the latter group including bacteriologic and chemical tests as well as physical signs.

Now while we should guard against first impressions as much as possible, yet at the same time there is value in even the first glance or the handshake, a trait cultivated by our predecessors in the darker medical era, who became adepts by force of necessity.

Physicians of experience are oftentimes guided in making a diagnosis of a patient's condition when coming into a sick room, by the scent emanating from the patient. Those of us old enough to have passed through epidemics of diphtheria, typhoid and measles before the days of rigid quarantine and the use of antitoxins remember full well the characteristic odor of those diseases.

The outward signs of disease have only to be seen to be appreciated. The facial expression often helps much when combined with the clinical evidence obtained by the painstaking examination as does the voice and speech, color and character of the skin. The quality of clothing and its condition may suggest social station. Carelessly worn and disarranged garments, stained with food droppings, if noted in a person formerly neat, suggests mental deterioration. An ammoniacal odor suggests prostatic or other disease of urinary tract. Edema of ankles may be suggested by the loose lacing of the shoes. A big belly in a thin man invariably indicates a pathological condition. There are many

other outward signs of disease which if recognized help greatly in completing the clinical picture.

Of the subjective symptoms probably pain is by far the most common and also the one for which relief is most often sought. Its differences are indicated by descriptive names such as dull, sharp, acute, stabbing, boring, tearing, burning, smarting and the like, all of which doubtless reflect more or less accurately the sensations of the victim and it is up to the ingenuity of the diagnostician to accurately interpret their significance. In this connection it is well to avoid a too implicit faith in the so-called "painful zones" which, though valuable and in general fairly suggestive, cannot be wholly trusted and often lead one far afield.

For instance, a painful area dedicated by the usual diagram wholly to appendicitis, serves as well for a local growth, post operative adhesions, arrested ureteral calculus, incipient hernia and even for the referred pain of certain pneumonias. Furthermore the early pain of an appendicitis is likely to be diffuse and far removed from McBurney's point. The site of referred pain is often far from its true source. A case of pneumonia in my early practice gave me no small amount of anxiety before I found that the seat of the trouble was in the left chest while all the pain was felt in the right.

Time will not permit any attempt to differentiate the various pains, but always bear in mind that abrupt, atrocious abdominal pain with localized or general tenderness, or a decided defensive rigidity, symptoms of shock or collapse and an initial sharp drop in blood pressure, will represent almost invariably a critical surgical emergency.

Renal colic may often be confounded with appendicitis or even acute lobar pneumonia and in one instance in my own experience I found what I feel sure was a case of appendicitis complicated with the passage of a ureteral calculus. A young man came to my office early one morning complaining of sharp pain and soreness in right abdomen a little above McBurney's point with pain radiating to right loin, temperature but slightly elevated, pulse one hundred. After a rather careful examination I diagnosed an acute flare-up of a somewhat chronic appendicitis

and advised an immediate operation, to which the patient consented without much ado and was admitted to the emergency room for same. While waiting for a nurse to come from town I gave him a pre-operative sedative of $\frac{1}{4}$ M. & A., which I thought would at the same time ease the pain, but much to my surprise the pain became more severe and required another $\frac{1}{4}$ of morphine to relieve. Upon opening the abdomen we found the appendix retro-peritoneal except for about one-half inch of its tip which was very much reddened and swollen. Appendix was removed after considerable sweating on my part and patient made a very satisfactory recovery, going to his home the ninth day. When he came to the office some time afterward he told me that one day soon after he went home, while urinating, the urine suddenly ceased to flow for a few seconds, then spurted forth again, and at the same time he heard a dull eliek in the vessel which he was using to catch the urine. Upon investigating he found a minute irregular shaped stone that he says, and I have no doubt, that he passed from the bladder. To my mind it is quite probable that when he came in for the appendectomy he was passing a calculus down the right ureter.

The older praetitioners are all familiar with the term "growing pains." The words afford a solace to disturbed parents and supply a subterfuge for the confused physieian. It is said that the expression was coined about a century ago. In 1884 Jaeobi announced that these vague, ambiguous pains in ehildren are probably associated with rheumatism. He clearly saw the clinical relationship between growing pains and artieular rheumatism. He at that time wrote that "growing pains" are not infrequently inflammatory rheumatism and that endoearditis of later years may often be traced baek to the growing pains which are but dimly remembered. Personally I can recall more than one ease in my own practice where an endocarditis occurring in early adult life could be traced back to a definite history of growing pains in childhood. Surely there is timeliness in the conclusion that the term "growing pains" is a misnomer and should be discarded.

I think our mistakes are apt to teach us

more than our successes and experience only can round out one's diagnostic ability.

I can recall vividly some of my outstanding errors that I know have fortified me against a repetition of the same laxity.

Since the inauguration of routine vaccination and rigid quarantine, with stricter regulation regarding domestic water supply, many epidemic diseases have become more often endemic and the physician is more apt to fail at first to recognize the rare disease in his community.

To give you some eoncrete examples in my own experience I recall a case, a man fifty-four years of age with a history of arrested tuberculosis of lungs in his younger days, whom I was called to see one day, with what he termed a laryngeal cold, and he was a retired M. D. He had a hoarse, dry eough with a moderate fever but ehest examination was negative and in fact the examination seemed negative all along the line execept for this history of arrested tubereulosis, the cough, slight elevation of temperature and red fauces. I advised the patient to see a good throat specialist whom I recommended and he complied, with the result that the throat man made a positive diagnosis of tubereulosis of the larynx and advised sanatorium treatment, whieh of course I seconded. The patient demurred somewhat at this and delayed leaving home for a week or more, during which time he had lost his appetite, grown weak, had a mild delirium at night with an increased temperature, and one morning complained of pain in the abdomen, whereupon I uncovered the abdomen to find a most beautiful crop of rose spots. A Weidel confirmed a diagnosis of typhoid fever.

Again I was called to attend a woman in the second week after a forceps delivery by a physieian in a neighboring town. Found woman with high temperature, pulse rapid and a peculiar vaginal discharge of uncertain odor, whieh ease in consultation with a valued colleague we diagnosed as puerperal infection. With symptomatic treatment patient continued to get worse in every way until about ten days after I first saw her she had several profuse hemorrhages from the bowels, following whieh she collapsed and promptly died, but not until I had obtained ten C. C. of blood

for a Weidel which completed my final conclusion of a case of typhoid.

Several years ago a patient of mine, some seventy years of age, who had been a semi-invalid for a few years, was taken suddenly one day with a severe pain in epigastrium which even a grain of morphine in one hour in divided doses failed to relieve. This patient for years had had considerable trouble with her digestive apparatus and I believed at the time of this attack that gas in the stomach was causing the pain and prostration and complete demoralization of her heart's action. She lived about twelve hours and passed out of the picture without obtaining complete relief from the pain. Since then I have seen several cases of coronary embolism, some recovering and some dying, which have made me on the alert to recognize what I believe I failed to comprehend in the first instance and I believe to-day many a patient whose death is ascribed to acute indigestion is in reality a victim of coronary occlusion, a condition which often in those cases of lesser involvement if recognized early and co-operation of the patient in proper treatment is obtained may go on to a very gratifying recovery.

I remember well another experience where I was called in to see an old lady who had fallen and hurt her hip several weeks previously. Had been attended from the time of the accident by a perfectly reputable physician who, during the week previous to the time I was called, had made repeated attempts to get the old lady up on her feet, but the pain was so excruciating at each attempt that the patient finally rebelled and demanded that some other doctor be called to see her, which resulted in my entrance upon the case. I found the woman lying on the bed upon her back with both legs extended, the right foot fully everted, and any attempt to re-adjust it produced an apparent pain in upper thigh. Measurements showed the right leg to be two inches shorter than the left. After a few gentle manipulations fracture of the neck of the femur was very evident to me and I think it would have been as much so to anyone who had proceeded with a thorough examination of the patient.

At that time X-rays were not so common as now and portable machines out of the ques-

tion, but any injury to-day having the least possibility of bony injury should be X-rayed.

All these reported errors only illustrate and emphasize this one fact which I am attempting to impress upon your minds to-day and that is, hasty conclusions are often wrong and that in arriving at a diagnosis in any case we should make a painstaking examination, using every means available to obtain all the information possible that might have any bearing upon the seeming complaint. Until we have done that we have failed in our duty to our patient and ourselves.

One other feature concerning the human system which I believe is so often overlooked in making up our diagnosis in a given case and that is the possibility of oral focal infection. It is so easy to forget the important part the mouth, its constituents and adjacent structures play in maintaining health or in inaugurating disease. And so often too it is so difficult to get the coöperation of the dentist in your attempt to make certain regarding the condition of the teeth. A few years ago it was a sort of fad to advise extracting all the teeth for various diseases on the ground that they might be a cause, and since then the pendulum has swung far to the other side of the arc, but with proper use of the X-ray and interpretation of its findings I believe that there is a safe middle ground which if intelligently cultivated will often lead us out of some very difficult problems.

I am convinced that oral focal infections may be associated not only with the teeth but with the tonsils. That infection of the tonsils is frequently secondary, whereas the primary focus lies in the teeth.

Now if I have by these rambling words of mine stimulated among you gentlemen a desire to talk and tell us some of your outstanding errors or marvelous feats in the remaining time allotted to us, I know that we will all be mutually benefited.

For Sale

Cheap for cash. Two diathermy machines, one galvanic battery, one colonic irrigating apparatus, drugs, surgical instruments, and medical library. All in good condition.

Mrs. W. H. Harris,
68 Grove St.,
Augusta, Maine.

Abstracts

Canadian Medical Journal, August, 1934.

H. R. Griffiths of Montreal reviews three hundred and fifty administrations of cyclopropane anaesthesia and remarks that in Montreal it is used in preference to other general anaesthetics.

It is safe, controllable, non-irritating, non-toxic, permits good oxygenation, is pleasant and gives good relaxation.

A small rectal dose of avertin makes a good combination with cyclopropane for major surgery. Nausea and vomiting occur in the same proportion as other gas anaesthetics. There were no cases of post-operative pneumonia.

It is inflammable and explosive in certain proportions, but its range of explosibility is less than ethylene or the nitrous-oxide-oxygen-ether mixture so commonly used.

Patients under cyclopropane, as other gas anaesthetics, bleed more than do ether patients; it is superficial bleeding due to some effect on vasomotor control of the arterioles.

A. T. W.

"The Use of Galactose in the Differential Diagnosis of Jaundice"

(A PRELIMINARY REPORT)

K. A. OWEN, M. D., Cleveland, Ohio.

The Journal of Laboratory and Clinical Medicine, September, 1934.

This report deals with clinical studies of cases of relatively painless acute jaundice in which neither the history, physical signs, nor laboratory reports make the diagnosis clear. These cases may be due to common bile duct obstruction of one sort or another, or may be caused by acute or subacute diffuse liver damage, such as occurs in catarrhal jaundice or toxic hepatitis. The disadvantage of older tests of liver function have been that these would measure only one of the many functions of the liver, e.g., the Van den Bergh test measuring the pigmentary function, the dye excretion tests, the excretory function. When there is extensive acute, or subacute damage to the liver, there follows subsequently a derangement of its glycogenic function, or carbohydrate metabolism. This also occurs when chronic damage has gone on to such a stage that regeneration of liver tissue fails to compensate. Such situations are where the metabolism of galactose will serve as a very useful guide as to whether jaundice is due to intra- or extra-hepatic pathology. The normal liver can metabolize about 40 grams of galactose with a urinary output of from 0 to 3 grams. An output of 3 grams or more is considered abnormal. The test is carried out by giving the patient 40 grams of pure galactose, dissolved in one pint of water. A fasting urine specimen is first obtained. Breakfast is omitted. All urine voided in the next five hours is collected, preferably in hourly specimens. These are tested qualitatively for galactose and all positive ones are lumped in one volume and tested quantitatively by the Benedict method. The conclusions of this study were: (1) those excreting abnormal amounts of galactose had diffuse liver damage, (2) those with a normal output had biliary obstruction as a cause of their jaundice; (3) this test has value in prognosticating the course of an illness from catarrhal jaundice or toxic hepatitis as the excretion of galactose changed often before clinical changes occurred.

D. H. D.

"Effect of Amniotin in Gonorrheal Vaginitis"

DR. JOHN HUBERMAN AND DR. HOWARD ISRAELOFF.
Journal of American Medical Association,

July 4, 1934.

In the adult female, the thick cornified epithelium of the vagina is resistant to the gonococci and therefore gonorrheal vaginitis per se is uncommon. In children, however, the gonococci flourish on their delicate mucous membrane and penetrate into the subepithelial spaces—the disease thus becoming resistant to local treatment.

In this investigation, no local treatment was used. One hundred twenty to 200 rat units of oral Amniotin daily, or 100 rat units given hypodermically three times a week was administered. At no time was there any constitutional reactions from the treatment, nor was there any hypertrophy of breasts, labia or uterine bleeding.

The cases used showed positive vaginal smears and cultures with the clinical signs. After four weeks of the above treatment, three chronic cases showed no further vaginal discharge with vaginal smears negative. Three acute cases required longer and more intensive treatment. Twenty-seven injections (2700 rat units) were given, and after eight weeks, the vaginal discharge disappeared, with negative smears and cultures.

Throughout this study, biopsies from the lateral wall of the vagina were made before and after injection of Amniotin in every case. These showed the effect of the Amniotin histologically.

It is the formation of the cornified layer of epithelial cells which acts as a barrier against reinfections and the increase in the number of epithelial layers of the vaginal mucous membrane which are the factors in overcoming the disease. The vaginal structures involute when treatment is stopped.

The treatment is safe and does not require hospitalization.

H. S.

"Recent Experimental Work on Physiology of Hearing—Its Significance to the Otologist"

LURIE.

Laryngoscope, June, 1934.

This article is based upon work done at the Harvard Medical School, following out the work of Wever and Bray at Princeton. It is believed that the bending of the hair cells in the Organ of Corti sets up electrical disturbances which reproduce accurately the sound sent in. These electrical changes which are set up in the hair cells probably stimulate the nerve endings in these cells and initiate the nerve impulses which travel to the spiral ganglion and then through the auditory nerve to the auditory tracts in the brain. From present experimental evidence it seems that the basilar membrane responds for tones below 1000 by vibrating as a whole, while for tones above 1000, only a segment of the basilar membrane vibrates. This seems to substantiate the Telephone theory for the low tones and the Resonance theory for the higher tones. Probably some combination theory will ultimately prove correct.

F. T. H.



The President's Page

TO MEMBERS OF THE MAINE MEDICAL ASSOCIATION:

There can be no doubt that the high-light of the Clinical Session held in Portland on October fourth and fifth was the address by Timothy Leary, M. D., of Boston, formerly Professor of Pathology and Bacteriology in the Tufts College Medical School and now one of the very capable Medical Examiners of Suffolk County. His remarks, entitled, "Coronary Sclerosis—a Metabolic Disease, with Analogies to Diabetes, Gout and Obesity," were beautifully illustrated by lantern slides which, combined with the lecturer's capacity for elucidating his subject, made an inspiring and lasting impression upon the minds of his large audience.

Of course, few persons present had the background of training to appreciate the character of work essential in the preparation of his thesis, original work for which he was awarded the Silver Medal by the American Medical Association in Cleveland at the 1934 session. However, it was made clear that cholesterol, the metabolic agent concerned in the production of atherosclerosis, "is a necessary part of every animal cell, forming from Starling's concept, the stable groundwork of the cell cytoplasm." The substance—a sterol—is not synthesized by the human body. "The most urgent demands for it come at times of most rapid cell formation. Egg-yolk is intended for the embryo. Milk is intended for the infant. . . . Man is the only animal that ingests eggs and milk throughout its lifetime. Man is the only animal, as far as is known, which dies in early life from coronary sclerosis, and which acquires atherosclerosis almost universally in advanced life."

The analogy of the disease atherosclerosis to diabetes was pointed out. "It is true that sugar is one of the most soluble and combustible food substances, and that its permanent storage in the body does not occur, while cholesterol is not combustible, its avenues of excretion are limited, and it tends to be stored. However, as in diabetes, marked variation in idiosyncrasy to the substance seems to exist. As in diabetes, the inheritance of a poor cholesterol metabolism appears to be associated with the tendency to an early death from coronary sclerosis. As in diabetes, advancing age, with the development of inefficiency of the cholesterol metabolism, appears to be associated with more frequent late manifestations of the disease.

Recent human experience in diabetes supports the experimental findings in rabbits following cholesterol feeding. During and following the period when diets excessively rich in fat were used in the treatment of diabetes, there was so great an increase of atherosclerosis that Shields Warren wondered whether the increase was due to the diabetes or to the treatment of disease."

Not so long ago the distinguished Dr. Osler said, in effect, that he was more and more impressed with the part played by overeating in inducing arteriosclerosis. He thought there were many cases in which there was no other factor. Doubtless, there are such cases.

However, to the teaching of Osler, concerning the quantity of food, must now be added the lesson taught by Leary's researches, relating to the quality of food. And eggs and milk stand convicted. The food of babes, and invalids with "weak stomachs," bears etiologic relationship to that diabolic condition

known as coronary sclerosis. Not all persons metabolize cholesterol badly, we are told, but the test of whether one does or not is like the perilous but decisive one for mushrooms,—if one eats them and lives they were edible.

Other observers will promptly prove or disprove Dr. Leary's findings. If their correctness shall be established beyond peradventure, means will be forthcoming equally speedily whereby man may know whether for him cholesterol "ist verboten" or not.

Thus, through the diligence and talent of Dr. Timothy Leary will the regular profession of medicine again have proved itself singularly beneficent to mankind, as it has been in the cases of Anesthesia, Sanitation and Asepsis; to say nothing of the introduction of thyroid extract, liver, insulin, salvarsan; the organization of hospitals; the development of the institution of nursing; the eradication of typhus and yellow fevers and malaria; and the reclamation of many of the earth's waste places.

These are the products of minds that have incentive to work: minds that are unmuzzled, unhampered, unobstructed, unfettered, uncontrolled, unenslaved, unsocialized.

To make slaves of such minds by bringing them under political domination through any visionary scheme of State Control of Medicine will sound the death-knell to medical progress.

E. W. GEHRING.

Necrology



Willis Bean Moulton,
Portland, 1877-1934

After a week of pneumonia Dr. Moulton died Friday, September 14, 1934, at the

Maine Eye and Ear Infirmary. He was born in Portland, March 20, 1877, and received his education in the Portland Public Schools, was graduated from Bowdoin College and from Johns Hopkins University.

During the World War he was commissioned as captain September 12, 1918, and assigned to the Medical Officers' Training Group, Camp Greenleaf, Chickamauga Park, Ga. He served as instructor in the School of Military Surgery. He was then transferred to Lutle, Ga., as acting commanding officer of Evacuation Hospital No. 57. Again he was transferred to the General Hospital No. 26, at Fort Des Moines, Iowa, and during the demobilization of the 26th Division from February to June, 1919, was assistant chief of surgical service at the base hospital, Camp Devens. He was then transferred to the General Hospital, No. 30, Plattsburg Barracks, N. Y., and acted as chief of Surgical Section No. 2, until he was discharged from the service August 6, 1919, with the rank of major. His service during the war speaks for itself.

He belonged to many clubs, social and medical. He was a Fellow of the American College of Surgeons and was a member of the Medical Advisory Committee of our Associa-

tion, as well as a member of several staffs of local hospitals.

He was a handsome, charming fellow with a smile that must have prolonged the lives of many of his dying patients.

He was a very skilful surgical operator and very successful as a gynecologist.

We extend our heartfelt sympathy to his bereaved widow, Mrs. Jean S. Moulton.

Wilde Memorial Chapel was filled with sympathizing friends on Monday, September 17th, where a brief religious service followed and then a volley was fired over his grave and taps sounded, and so we left our lamented friend.

"Beany," he was to us from his family name, and it was partly sport and partly to distinguish him from another physician in Portland of the same family name.

J. A. S.



*William Hugh Harris,
Augusta, 1861-1934*

After a long illness Dr. Harris, aged seventy-three, died at Augusta, June 13, 1934.

He was born in Florida, August 7, 1861, the son of Charles Miller and Isabella Jewett

Harris. His father was of a family of South Carolina, which had provided at six different times governors of the State. On his mother's side he descended from the Jewetts of Bangor and Belfast and he was connected with the Hon. John Wilson of Belfast, who was the first Congressman from the State of Maine.

When he was a boy he lived on a ranch in California for four years and returned East for the study of medicine, was graduated from the University of Vermont in 1888 and then identified himself with this State for the rest of his life. He practiced more than forty years in Bangor and was a leading physician, often being called in as an "eleventh hour" man. He was past president of the Kennebec County Medical Association and belonged to the American Medical Association. For eighteen years he was a Medical Examiner for Kennebec County and for twelve years was on the State Board of Registration and was past president of the U. S. Pension Examiners' Board of Kennebec County. For some time he was attending surgeon at the National Soldiers' Home and was also consulting surgeon at the Gardiner General Hospital and the Augusta State Hospital. Since the opening of the Augusta General Hospital until recent failing health caused his retirement. Dr. Harris was attendant surgeon and a long time chief of the staff.

In the summer of 1910 he, with several other Augusta physicians, made a grand tour of European hospitals.

Dr. Harris on settling in Augusta married Miss Martha Jewett North, daughter of Dr. James Douglas North, very celebrated in his medical career in Maine. Of the six children born to Dr. Harris and his wife, one alone survives, a son, Charles.

J. A. S.

Announcement

State Department of Health

On September 26th, the Advisory Council of the State Department of Health and Welfare rescinded Section 6, the regulations relating to the examination of Food Handlers. This means that these examinations are no longer required. Other clauses in the regulations fully take care of this problem.

Horace E. Snow, Bucksport, 1860-1933

Dr. Snow was born at sea, May 5, 1860, but always claimed Bucksport as his residence, his father having been born there. He attended the Bucksport schools and graduated from Bowdoin College in 1882 and from Bellevue Hospital Medical College in 1886. He immediately opened his office in Bucksport and practiced there forty-eight years in all. He married after his first year of practice.

He was a member of the Maine House of Representatives in 1911, was on the School Committee several years and was also U. S. Pension Examiner. For years he was a member of the Penobscot County Medical Association and was an active Freemason.

He was drowned April 27, 1933, when a canoe upset, from which he and one other were fishing at Branch Pond, Ellsworth. His body was not recovered.

Russell Davenport Walton, Frankfort, 1877-1934

Although Dr. Walton had practically retired from our Association a short time before his death, his services to medicine at Frankfort were in his time of active practice, of value to the Maine Medical Association, and we thus offer to his memory a fleeting reminiscence of his career.

The son of Frederick H. Walton and Annie Garland, he was born at Alton, March 9, 1877, studied the common branches of literature at the schools of Orono and was graduated at the University of Maine. He took up medicine at once and obtained his degree of Medicine at the College of Physicians and Surgeons at Baltimore in 1902. He settled in Frankfort in the winter of 1902 and practiced there until his health gave out and he regretfully withdrew from medical practice in 1929 and died April, 1934.

County News and Notes

Cumberland

Dr. Stanwood E. Fisher announced the removal of his offices to 723 Congress Street, Portland, Maine (with Dr. E. E. Holt, Jr.), on September first.

Dr. Roland O. Meisenbach has moved his offices from 31 Deering Street to 65 Pine Street, Portland, Maine.

The City of South Portland, having received notice of the need of economizing in the two offices of City Physician and Public Health Officer, removed Dr. Skillin as Health Officer and appointed in his stead as Health Officer and City Physician to carry on both offices, Dr. R. L. Huntress, at a wage of some \$350. less for the two offices than for two separate officials on the City role.

In kindness to the public career of Dr. Skillin the mayor of South Portland has publicly informed Dr. Skillin that the new appointment of Dr. Huntress was not made from any dissatisfaction with himself but simply to save money on the pay roll of the City.

Joint Meeting at Kineo

The Medical Societies of Kennebec, Piscataquis and Somerset Counties held a meeting at the Kineo House, Friday, August 3rd. In spite of the heavy rain over fifty members and wives, together with other guests, were present. Inasmuch as this was a special meeting there was no business session. The first paper was presented by Dr. E. T. Wyman of Boston, instructor in Pediatrics at Harvard Medical School and physician at the Infants' and Children's Hospitals. His subject, "Milk," was most interestingly developed and the importance of full attention to proper preparation of this food clearly shown. A two-reel movie of the huge Gordon-Walker milk plant in New Jersey followed his talk. One of the chief interests in this picture was the rotolactor, a merry-go-round upon which cows are washed, dried and milked in twelve and a half minutes.

George H. Coombs, M. D., from the State Department of Health, spoke on "Present Public Health Problems in Maine." A. H. Morrell, M. D., conducted a round table discussion on "Laboratory Technique."

E. H. Gehring, M. D., President of the State Association, addressed the meeting, discussing various topics of vital interest to the medical profession through the state.

Announcements

ACADEMY OF PHYSICAL MEDICINE. Annual Meeting, Hotel Pennsylvania, New York, October 30 and 31. For information, address Arthur H. Ring, M. D., Secretary-Treasurer, Arlington Heights, Mass.

Memo-Scientific Committee

Meeting of the Scientific Committee was held in Waterville, Wednesday, September fifth. There were present, Doctors Cummings, Jameson, Hill. Absent, Dr. Moise. It was voted to recommend to the Council that the next Annual Meeting be held at Rangeley some time in June, about the twentieth, exact dates to be determined later. It was voted that a conference for Medical Examiners be included in the next year's program. The proposal that the afternoon sessions be limited to three thirty-minute papers was voted down, it being the sense of the committee that the afternoon sessions should be kept with four twenty-minute papers. It was suggested that endeavors be made to obtain research papers from Doctors Harvey Cushing and Allen W. Rowe. It was the sense of the committee that the formal list of Available Speakers sent in previous years to county secretaries be discontinued, as it had been apparently little used, and that instead the Secretary notify each county secretary that they were at liberty to call on the members of the Scientific Committee for assistance in preparing their programs.

A second meeting of the committee is to be held in Portland in October, during the Clinical Session, at which time members are to suggest papers and conferences for next year's program. In surveying these possibilities, Cumberland, York, Oxford and Androscoggin were assigned to Dr. Cummings; Penobscot, Aroostook, Washington and Hancock to Dr. Moise; Knox, Lincoln, Sagadahoc and Waldo to Dr. Jameson; Kennebec, Somerset, Franklin and Piscataquis to Dr. Hill. It was also the sense of the committee that in the future the Scientific Exhibit should be in charge of this committee.

Books Received

The Compleat Pediatrician. Practical, Diagnostic, Therapeutic and Preventive Pediatrics. For the Use of Medical Students, Internes, General Practitioners and Pediatricians. By Wilburt C. Davison, M. D., D. Sc., M. D. Published by Duke University Press.

Conception Period of Women. By Dr. Kyusaku Ogino, Head of the Gynæcological Section of Takeyama Hospital, Niigata, Japan. English translation by Dr. Yonez Miyagawa, Director of Government Institute for Infectious Diseases, Tokyo Imperial University, Hongooku, Tokyo, Japan, June

6, 1934. Medical Arts Publishing Co., 1803 Wood St., Harrisburg, Pa.; 8vo, leatherette binding; price \$1.00.

Whither?

My friend, I pray you tell,

What place is this?

Is it Life?

A pleasant place, ah, well!

'Tis full of blundering strife,

The pace is swift and I am out of breath.

And now, what place is this?

It must be death.

WILIA FROST-GIBBS.

Ellsworth, Maine.

Licensing Questions

Every physician over thirty-five ought to hunt up the *Ohio State Medical Journal* for July, 1934, and on page 450, look over carefully and then read aloud to himself the questions asked on three hundred examination papers for license to practice medicine in Ohio as handed to the applicants by the state medical board in June. Such a reader and student of modern medicine will wonder what he could do with these questions after the ten years or more that he has been in practice. It is amazing to note the advances in medicinal teaching in ten years only, after graduation from his medical school.

It does not seem possible that everything asked is entirely novel to men in that period of practice. As we glance from one question to another we wonder if patients are cured sooner or more efficaciously by the new entrances into the practice of medicine than by the ways which we learned as the best in the world say of 1924 only.

Before we forget it, we are reminding our readers to turn to page 447 of this Ohio Medical School Society report and read what it has to say on the socialization of modern medicine and how it is harming the progression of today. To those who do not own the *State of Ohio Medical Journal*, we urge them to consult the *American Mercury* for April, 1934, and read Aspinwall's paper on the plight in which physicians have fallen and are slowly stifling from lack of careful thought and study.

For Sale

An "I. X. L." Air Compressor for an Aurist or Surgeon.

C. E. Norton, M. D.,
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● Drybak strappings give firm, steady support to weakened areas. The waterproof back-cloth permits patients to bathe without impairing these Drybak qualities. Water cannot make the plaster soggy or separate the adhesive from the back-cloth. The edges will not turn up. Drybak strappings come off cleaner, with less residue. Patients like the less conspicuous sun-tan color of Drybak—to avoid the usual “accident” appearance. Made in standard widths and lengths in cartridge spools, hospital spools, and in rolls, 5 yds. x 12", uncut. Order from your dealer.

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● This strapping was made with alternate strips of Drybak and white adhesive plaster. The darker, less conspicuous strips are Drybak.

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Heated and homogenized to give a real, friable soft curd characteristic as outlined by Washburn, Hess, Hill and others.

Recommended for use as an intermediate step between mother's milk and cow's milk. It serves to make the change less difficult because the fat globules are evenly dispersed; and the curd characteristic is even better than that of mother's milk. The curd tension is less than 10 grams.

This milk is indicated where an easily digested milk is required—following certain types of operative procedures, food poisoning, and so forth.

Because it lends itself to enrichment, Old Tavern Farm's Soft Curd Milk can be used for infant formulae. Unlike powdered preparations a true, colloidal suspension is maintained.

One of a series of advertisements prepared and published by PARKE, DAVIS & CO. in behalf of the medical profession. This "See Your Doctor" campaign is running in the *Saturday Evening Post* and other leading magazines.

YOU DON'T BELIEVE IN DOCTORS?

"I'M TOO BUSY to go to the doctor. And I haven't much faith in doctors anyway."

Every once in a while you hear a person make such a statement—perhaps you have yourself. Does it make sense? Let's see—let's look at life as it used to be and life as it is today...

A little over a century ago, smallpox was the rule rather than the rarity—in fact, a case is recorded in which a criminal was identified by the fact that his skin was unblemished by pockmarks!

Today, thanks to vaccination, smallpox has almost completely disappeared. A doctor discovered vaccination—every doctor now offers its protection.



UP until the middle of the 19th Century, a surgical operation was a horrible ordeal. The comforting oblivion of anesthesia was not known, and the lack of proper antiseptics made even the simplest operation an unequal gamble with death.



Today, surgery is so efficient, so advanced, so much a part of nearly everyone's experience, that we take even downright miracles as a matter of course.

TWELVE years ago, diabetes was a virtual sentence to death. Today, doctors can give most diabetics a normal span of life. Just a few years ago, pernicious anemia was hopeless. Today, it can be fully controlled.

Kidney disorders, childbirth, asthma, goiter—the terror of all of them has been lessened by miracles that modern medical science has wrought.

The discovery and application of vitamins have almost eliminated rickets and scurvy... and deserve much of the credit for the sturdy legs and healthy bodies of our children. Yet at the beginning of this Century, the word "vitamin" wasn't even in the dictionary.

Many diseases that were shrouded in mystery even as late as 30 years ago, are an open book to the doctor of today. Syphilis, whooping cough, scarlet fever—the causes of all have been discovered since 1900. And that means in most instances, also a method of control.

MEDICINE is a living thing, constantly growing, constantly developing, constantly moving forward. And the one person who can place this knowledge at your disposal is *your doctor*.

The men and women that comprise the medical profession spend years of preparation in learning to become doctors... and they keep in touch with medical progress through clinics, hospitals, medical societies, medical journals, medical conventions, and other agencies which help disseminate this precious knowledge.



It is a sensible thing to call upon your doctor frequently enough to *preserve* health as well as to *restore* health. Faith in your doctor, and intelligent recourse to the knowledge he offers, might mean the difference between a bed of pain and continued good health—between a premature death, and a pleasant and useful "threescore and ten."

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1911

"The limits of assimilation of the different sugars vary and are as follows:

"Grape sugar: In babies, about 5 grams per kilogram (Langstein and Meyer).

"Grape sugar: In one-month baby, 8.6 grams per kilogram (Greenfield).

"Galactose: No accurate data.

"Levulose: (Lower for babies than adults.) One gram per kilogram (Keller).

"Maltose: Over 7.7 grams per kilogram (Reuss).

"Lactose: 3.1-3.6 grams per kilogram (Grosz).

"Cane sugar: Probably about the same as lactose (Reuss)."—J. L. Morse, and F. B. Talbot: *Physiology and pathology of the digestion of the carbohydrates in infancy*, Boston M. & S. J., 164:852-855, June 15, 1911.

1912

"Maltose has for many years been considered one of the most valuable of infant foods in modifying milk formulas; but the German school in the last few years has called special attention to the value of this sugar as a substitute for milk and cane sugars in conditions of intestinal fermentation. It is more easily assimilated and more rapidly absorbed than lactose or saccharose and it may be taken therefore by the infant in larger quantities without producing sugar fermentation."

"Maltose is especially indicated in the feeding of very young and delicate infants, and in all cases where either milk or cane sugar has produced intestinal fermentation and sugar intoxication. In the feeding of maltose it has been found advisable to combine it with about equal parts of dextrin. In Germany, and later in this country, 'Soxhlet's Nahrzucker' (which contains maltose 52.44 per cent., dextrin 41.26 per cent., and sodium chlorid 2 per cent.) has been largely used. Mead's Dextrin-Maltose (malt sugar), which contains about equal parts of dextrin and maltose, is a similar preparation which may be used instead of milk sugar or cane sugar for modifying milk mixtures."—B. K. Rachford: *Diseases of Children*, D. Appleton & Co., New York, 1912, p. 125.

1913

"It is well to start with one ounce (albumin milk, or albumin-buttermilk) to every pound of body-weight in the twenty-four hours, increasing gradually until two or three ounces to the pound of body-weight are being given. Then add sugar, preferably a malt sugar, about one-fourth of an ounce at a time to the twenty-four hour quantity, until an ounce or an ounce and a half is being given."—J. Foote: *Principles of treatment in malnutrition and atrophy of infants*, Interstate M. J., 20:1913, No. 6.

1914

"Milk sugar and cane sugar may be used in infant feeding, but my preference is for malt sugar. Mead and Johnson put up a convenient preparation which they call Dextrin-Maltose and which consists of maltose 51 per cent., dextrin 47 per cent., sodium chloride 2 per cent., and which has a food value of about 110 calories per ounce."—J. A. Gannon: *Whole milk dilutions in feeding normal infants*, Washington Med. Annals, 13:38-43, Jan., 1914.

1914

"Dextrin-maltose causes the greatest gain in weight, cane sugar less, and lactose produces the least gain."—M. S. Reuben: *Observations on milk station infants*, Arch. Pediat., 31:176-196, March, 1914.

1914

"A composite opinion of the sugars is in favor of dextrin-maltose, milk sugar and cane sugar in the order named."—R. A. Strong: *Essentials of modern artificial feeding of infants*, Lancet-Clinic, March, 14, 1914.

1914

"Experiments show that sugars vary in their rate of absorption, some being assimilated rapidly, while others distribute their nutriment over a longer period. For example, maltose is most promptly assimilated, cane sugar next and milk sugar slowest."

"The condition in which dextrin-maltose is particularly indicated is in acute attacks of vomiting, diarrhea and fever. It seems that recovery is more rapid and recurrence less likely to take place if dextrin-maltose is substituted for milk sugar or cane sugar when these have been used, and the subsequent gain in weight is more rapid."

"In brief, I think it safe to say that pediatricians are relying less implicitly on milk sugar, but are inclined to split the sugar element, giving cane sugar a place of value, and dextrin-maltose a decidedly prominent place, particularly in acute and difficult cases."—W. D. Hoskins: *Present tendencies in infant feeding*, Indianapolis M. J., July, 1914.

1915

"In the severe cases (of diarrhea) be (Benson) uses Finkelstein's casein milk with malt sugar. He also believes that dextrin-maltose is

to be preferred to milk sugar or any other sugar, as the infants gain more rapidly and digest more easily this form of sugar."—R. A. Benson: *Observations on 1,500 artificially-fed infants*, Med. Century, Feb., 1915, p. 33; abst. Arch. Pediat., 32:556-557, July, 1915.

1915

"Until very recently we have taken it for granted that milk sugar was the best, but now many consider that malt sugar is even better. However, the malt sugar is not used in its pure state, but in the form of extracts, as dextrin-maltose."—E. B. Lowry: *Your Baby*, Forbes & Co., Chicago, 1915, p. 162.

1915

"Cane-sugar (saccharose), like most of the other disaccharids, is not absorbed as such, but must first be split by the invertase of the intestinal secretion into the two glucoses, dextrose and levulose, which are readily absorbable. Maltose (malt-sugar) occupies an exceptional position among the disaccharids, in being partly absorbable as such. This is probably due to the fact that it can be split not only by the maltase of the digestive juices, but also by the same ferment being present and active in the circulating blood (Chittenden and Mendel)."

"Anticipating a little, we may mention that all cases, in which lactose may advantageously be replaced by other carbohydrates, are pathological, and without exception the result of unsuccessful attempts at artificial feeding; they will therefore be discussed under that head."

"Dextrin, intermediate between sugar and starch, is physiologically nearer to the former; we shall have occasion to see that, under certain conditions, it may supplement sugar very advantageously. Given together with maltose, it materially delays the fermentation of the latter; Stolte observes that the more complex the carbohydrate the longer fermentation is postponed."

"All malted foods contain dextrin, and there is reason to believe that their value largely depends on their being somewhat complicated; such, at least, is the opinion of Usuki and Stolte, who believe that a mixture of carbohydrates is more slowly absorbed than a pure sugar, and therefore tends to check fermentation in the intestine. Southworth explains the matter more definitely, by attributing the antifermmentative action entirely to the dextrin, which is not fermentable as such, but only after it has been split into maltose, a process that takes place only gradually, and in the later stages of digestion."

"I make it a rule to give the ordinary formula with dextrin-maltose whenever the usual milk or cane-sugar mixtures seem to cause excessive fermentation and colic, or are attended with the evacuation of soap stools. I decidedly prefer this, as a preliminary measure, to going over at once to some very low fat combination, which can only be a temporary makeshift at best. I also find dextrin-maltose an excellent addition to albumin-milk when the first object of that food has been achieved and a gain in weight is desired; in this way I have succeeded in feeding albumin-milk far beyond the period usually advised, with highly gratifying results."—F. L. Wachenheim: *Infant-Feeding: Its Principles and Practice*, Lea & Febiger, Phila., 1915, pp. 31, 33, 146, 158.

1915

"The infant with diarrhea and vomiting is given nothing but tea for from twelve to twenty-four hours, no longer, and then the albumin milk is commenced, not over 5 gm. ten times a day, with 3 per cent. of a maltose-dextrin mixture. The amount of albumin milk is increased by 50 gm. each day until the daily ration totals 300 gm. After the weight has become stationary, carbohydrates can be added up to 5 per cent. of the maltose-dextrin mixture."

"Albumin milk is not so uniformly effectual in dysenteriform diarrhea as in cholera infantum. Whey seems to act better, diluted half and half with oatmeal gruel. After the starvation period he gives 50 gm. of the whey and increases by 50 gm. daily with equal amounts of oatmeal gruel. As improvement sets in 3 per cent. of a dextrin-maltose preparation can be added."—L. Langstein: *Cholera infantum and other severe diarrheas in infants*, Therap. Monatsh., V, 29, August, 1915; Abst. J.A.M.A., 65:1314, Oct., 7, 1915.

1916

"Dextrin-maltose, having a higher absorption tolerance than the other sugars, is less likely to cause intestinal disturbances when large amounts of it are given."—H. R. Mixsell: *A brief résumé of the role of carbohydrates in infant feeding*, Arch. Pediat., 33:31-36, Jan., 1916.

1916

In cases of malnutrition, and indigestion in infancy, "The appetite improves rapidly, and the stools soon become normal in appearance, if the sugars are intelligently prescribed. By this I refer to proper proportions of dextrin and maltose. When there is a tendency to looseness, I have used the preparation known as 'dextrin-maltose,' for the extra carbohydrates; . . ."—M. Ladd: *Further experience with homogenized olive oil mixtures*, Arch. Pediat., 33:501-512, July, 1916.

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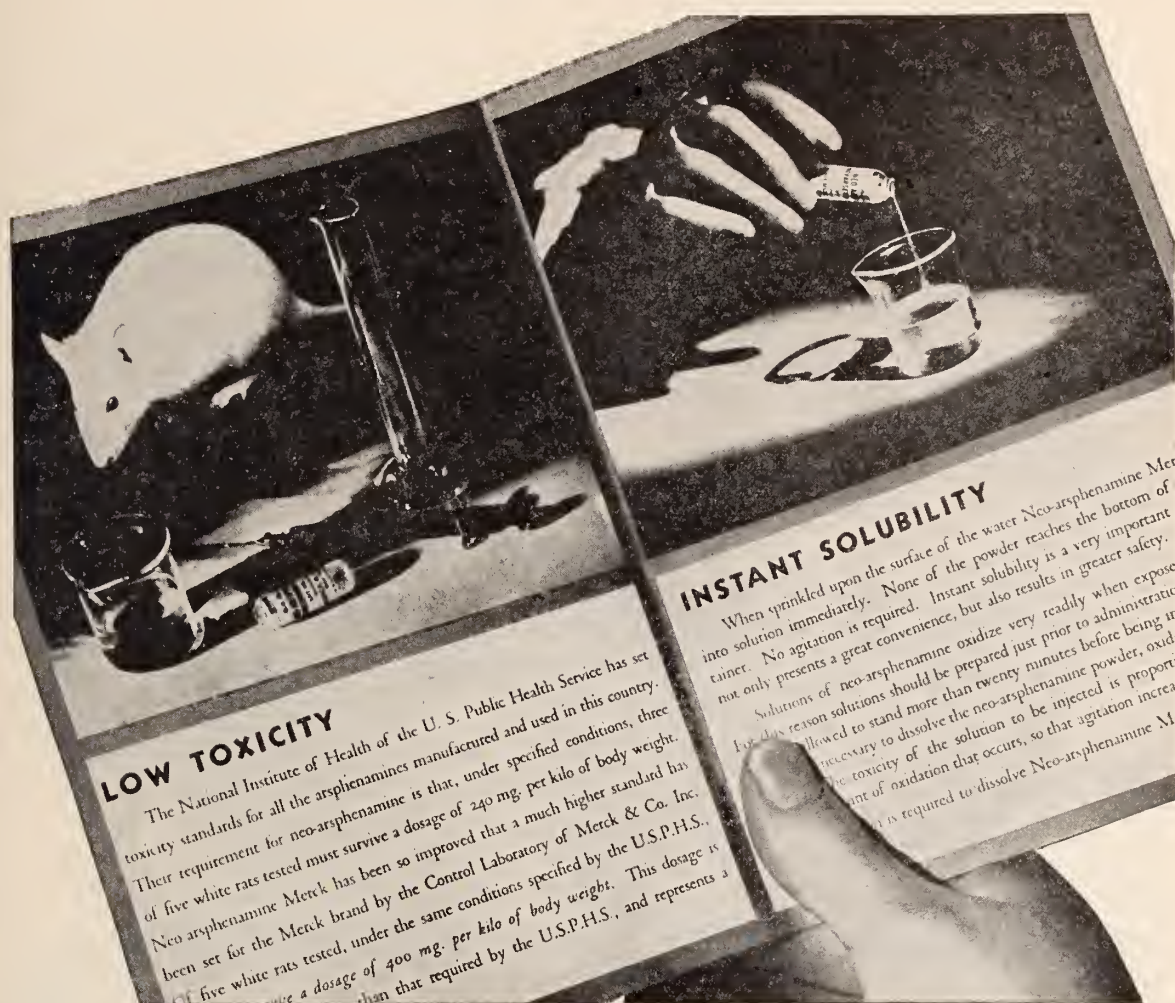
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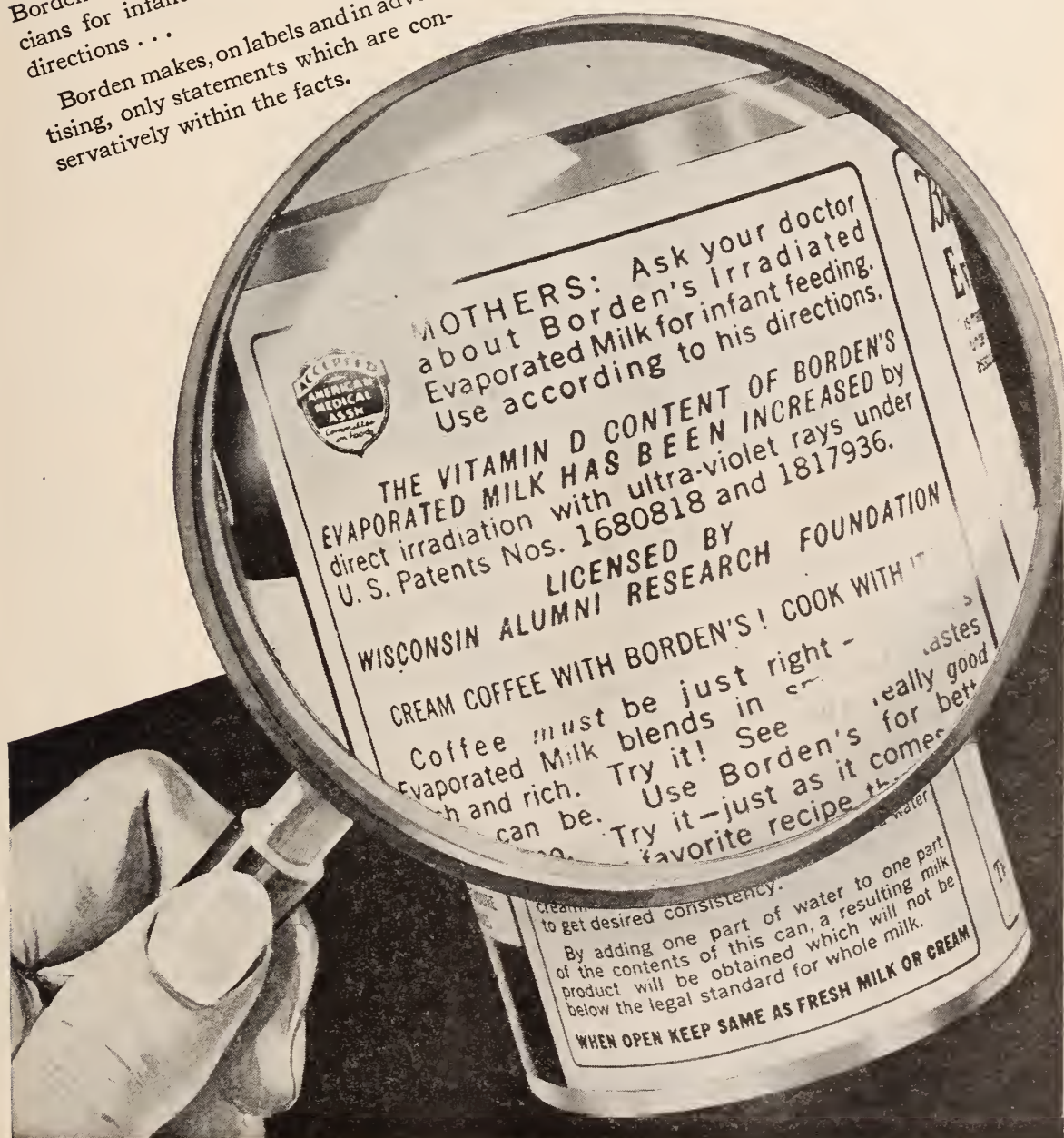
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Portland, Maine, November, 1934

No. 11

Editorials

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The attendance expected was one thousand, but it was generally understood that it ran up to five thousand. It was a grand success from every point of view. We are looking forward not only hopefully, but assuredly, that when the proceedings are printed and forwarded to us we shall enjoy a symposium well worth the while.

"Nuts as Bronchial Foreign Bodies"

This is the title of a fine paper in the *New England Journal of Medicine* for October 11th, by Dr. Richards and Dr. Walker, both of Boston. The topic is carried on in a delightfully instructive and well-written description of the state of affairs when nuts are inhaled into the bronchi and should be very carefully read by every practitioner of medicine. There is hardly a member of our profession who may not have seen a case of this description in any long career of practice. At such a time when treatises are not quickly available, and most of them have very little to say on this, what might be called a children's topic, this paper, ready at hand or in a scrap-book, fills fully indeed a long-felt want in the professional office. The paper in question treats not only of nuts as foreign bodies, but refers abundantly to nut-containing candies. The uses of the X-ray in discovering these foreign bodies and how to employ it to the best advantage in the almost innumerable complications exhibited in one case and another, as well as laryngeal complications and bronchoscopies are largely dilated upon, and a succinct history of twenty-six cases ends this remarkable paper which we repeat will help the active physician in actual practice.

For any one of us may, at any time, day or night, in this nut-eating country, be glad of the instruction exhibited in the pages of this article—only ten in number.

What with this essay and Dr. Overholt's elaborate paper close at hand in the same number, "Why Surgical Operations Benefit Patients with Pulmonary Tuberculosis," this journal is a noteworthy contribution to New England surgical literature of to-day.

The October Meeting

The attendance at the October Session in Portland gave evidence of the growing interest in this recently inaugurated feature of our annual program. There were 224 members registered. One cannot refrain from offering a word of condolence to the absentees to remind them of their loss. It would really seem as though nothing short of continued attendance throughout the session were fully adequate, for every event was worth while. Two days of excellent clinics, both wet and dry, separated by an evening meeting featuring a speaker of national prominence, were offered the members of the Maine Medical Association.

The hospitality of the several hospitals whose guests we were at luncheons was cordial. The reception by Dr. Abbott on the first afternoon was largely attended and the personal charm of the host once more acclaimed. On the second afternoon we were privileged to meet Dr. Cousins in the atmosphere of his delightful home and to experience again the delightful personality of this old friend.

To the Cumberland County Society should be meted out a full measure of gratitude for the high quality of their medical and surgical pabulum, a genuine compliment for the orderly smoothness of the clinical sessions, and a note of appreciation for bringing to us the high privilege of listening to Doctor Leary with his fundamental message of deep import. And not the less must we appreciate the ubiquitous spirit of genuine hospitality which enhanced our fellowship and deepened the entire value of the session.

The benevolent influence of the parent Society upon the quality of medical practice within the broad limits of our State must largely increase when, in compliment to our annual session, we can develop and so largely attend these splendid clinical sessions of the Spring and Fall.

The Cumberland Society has scored high!

C. H. J.

**Some Observations on the Treatment of the More Common Forms of Heart Disease*

By WARD J. RENWICK, M. D., Auburn, Me.

We should all be interested in heart disease, if for no other reason than it is the great cause of death. Mortality statistics show that as a cause of death heart disease ranks first, followed in order by (2) Cerebral hemorrhage, (3) Cancer, (4) Tuberculosis, (5) Nephritis and (6) Pneumonia.

A recent survey by the New York Department of Health showed that the mortality from heart disease exceeded the mortality from cancer, tuberculosis and accidents, including motor fatalities, combined. Heart disease accounts for seventeen per cent. of

all deaths among adults; one heart death occurs in every six or seven deaths without age restrictions. According to the *Journal* of the American Medical Association in 1930, sixty per cent. of deaths among physicians resulted from heart disease. According to Government statistics, Maine stands fourth among the states having the highest mortality from heart disease. We are preceded by Vermont, New Hampshire and New York and followed by Massachusetts and Rhode Island. It is of more than passing interest to note that the six states having the highest mor-

* Read at the annual meeting of the Maine Medical Association, Bangor, Maine, May 29, 1934.

tality from heart disease are situated along or adjacent to the northeastern part of the Atlantic seaboard. In Maine the mortality from heart disease has increased nearly eighty per cent. in the last three decades.

Out of this unsatisfactory situation there has come one bright spot, and from this we should derive considerable consolation—the highest mortality from heart disease is now reached in the seventh decade of life; we are living longer due to the marked decrease in certain infective processes earlier in life, viz: diphtheria, typhoid and tuberculosis; thus we live longer and reach the greatest period of the cardiovascular degenerative processes in the seventies, and these degenerative processes, arteriosclerosis and hypertension, take a heavy toll from heart involvement. The further postponement of these changes presents a problem to the medicine of tomorrow. As White has aptly said, “Life is being limited by the degenerative diseases of old age rather than by the infections of youth.”

In any consideration of the treatment of heart disease, an accurate diagnosis is important. It should be based on, (1) The cause of the cardiac pathology, the so-called etiological diagnosis, (2) It should designate the nature of the pathology present, the so-called pathological diagnosis, and (3) It should name the type of disturbance of cardiac function present, the so-called physiological diagnosis. To illustrate, a patient has a history of rheumatic fever; he also has mitral stenosis and auricular fibrillation, hence the etiological diagnosis is rheumatic fever, the pathological diagnosis is mitral stenosis and the physiological diagnosis is auricular fibrillation.

The present-day conception of heart disease is to stress the underlying pathology and somewhat minimize certain valve conditions and their murmurs. S. Calvin Smith has propounded the following aphorism:—

“The muscle is of more importance than the murmur;
The rhythm is of more importance than the rate.”

With these rather rambling remarks as a preface, let us consider first the problem of paroxysmal tachycardia. We are interested in two types:

- (1) Auricular paroxysmal tachycardia,
- (2) Ventricular paroxysmal tachycardia.

A patient thirty years of age with repeated attacks of rapid and regular heart action, these attacks have an abrupt onset and an equally abrupt offset, the etiology is not certain as she has no heart disease, during the interval between attacks she has a normal electrocardiogram, however with the onset the electrocardiogram shows complexes peculiar to paroxysmal tachycardia, auricular in origin. On previous attacks the patient had been treated with quinidine and later with digitalis with indifferent success. It was found that the simple act of carotid sinus pressure stopped the paroxysms in quite a dramatic manner, both in this and subsequent attacks. Some 20% of these cases respond to this manipulation. The mechanism is a reflex from the sensitive carotid sinus to the medulla through the ninth nerve, the return being through the vagus. Ocular pressure often has the same effect but is more uncomfortable and the response is less sure. In the cases that are resistant to carotid sinus pressure, quinidine will succeed in about a third of the cases. This failing digitalis may be tried, but very little should be expected from it.

A boy twelve years of age with a history of rheumatic fever with mitral involvement of six years' duration, his compensation was well maintained, he attended school with limited activities. One day the lure of a ball game tempted him and on returning home his mother noticed that he was dyspnoeic and his heart was beating very rapidly. He was seen a few hours later and it was noted that with the rapid rate there was an arrhythmia. This boy at his best always showed extrasystoles. This fact with the arrhythmia made us suspicious that his tachycardia was ventricular in origin. The electrocardiogram corroborated our fear, the ventricular complexes were all in the same direction, which held out the hope that treatment might be successful. He was given quinidine two grains every three hours; after the seventh dose sinus rhythm returned.

Here, then, are two cases of paroxysmal tachycardia, one auricular in origin, which is usually of no great importance, the other ventricular in origin, which is often a serious condition, usually fatal if the ventricular complexes are bidirectional. In this case they were all in one direction and the patient re-

covered. These two cases illustrate the necessity for an early diagnosis whenever a persistent tachycardia is encountered. Quinidine has won its greatest laurels in ventricular tachycardia.

Congestive Heart Failure. A male patient sixty-six years of age with hypertensive heart disease of several years' duration, the heart was markedly enlarged with regular sinus rhythm, dyspnoea and orthopnoea were marked, the legs were edematous—the so-called hard type of edema—fluid was present in the peritoneal cavity and moist rales at both bases, a systolic murmur was present in the mitral area, which was considered to denote a relative mitral insufficiency incident to stretching the valve ring when the heart enlarged. This, then, was a case of hypertensive heart disease with cardiac hypertrophy and a relative mitral insufficiency.

The treatment was Salargan one cc every other day for four doses, the diuretic response was marked, his weight decreased fourteen pounds in five days. During the first three days he had one-fourth grain of morphia each evening, none after that. After the eighth day the Salargan was given twice each week, and ammonium nitrate was administered in doses of two grams three times daily. At the end of three weeks he had a moderate amount of dyspnoea, no orthopnoea and no edema, the lung bases were dry.

In heart disease myocardial failure is always the underlying cause of edema; the large accumulation of fluid in the tissues and cavities so overwhelms the already impaired myocardium that it is often impossible to increase its function enough to eliminate the accumulated fluids. The problem, then, is the administration of remedies that inhibit the retention of fluids in the tissues; these remedies are the mercurial diuretics of which Salargan is the most efficient, and the group consisting of urea, ammonium nitrate, ammonium chloride and calcium chloride. The dehydrating effects of this group is due largely to the mild acidosis they produce. Ammonium nitrate has served me better than any of the others.

The above treatment has greatly decreased the necessity for paracentesis of the chest and abdomen and rendered the use of Southey's tubes and incisions in the legs almost extinct.

Cases of this type of heart failure without arrhythmia and with the hard type of edema are better treated without digitalis.

Another case of congestive heart failure, a patient forty years of age with a long history of rheumatic heart disease, having on admission dyspnoea and orthopnoea, the legs were edematous to the body—the so-called soft type of edema—there was fluid in the peritoneal cavity, with moist rales at both bases and a productive cough; arrhythmia due to auricular fibrillation was present and mitral damage was marked. The electrocardiogram showed right axis deviation. This, then, was a case of rheumatic heart disease with mitral stenosis and auricular fibrillation.

The weight of the patient was one hundred sixty pounds, he was given twenty-six grains of powdered digitalis leaves during the first four days, thereafter three grains daily for the next eight days, then a maintenance dose of twelve grains each week. During the first four days he had morphia one-sixth grain each evening, none after that. At the end of two weeks he had considerable dyspnoea, no edema, no orthopnoea, a few rales at the bases and a slight non-productive cough remained.

This is a typical digitalis case, the rapid ventricular rate with marked arrhythmia and edema—the so-called soft type of edema. With these findings digitalis in adequate dosage rarely disappoints us.

These two cases of congestive heart failure—one treated with digitalis and the other without the drug—should emphasize the fact that the diagnosis of congestive heart failure does not always indicate the use of digitalis. The universal use of digitalis in congestive failure, largely founded on tradition, is to be deplored. Edema is responsible for most of the symptoms of congestive failure and the routine use of digitalis alone is often a source of hardship and danger to the patient. Cases of congestive failure that fall between these two types described and include some phases of both may require both digitalis and diuretics.

Auricular Fibrillation. This arrhythmia is more often associated with heart disease than is any other condition, hence it is one

of the most important disturbances of cardiac rhythm.

A man fifty years of age has had attacks of paroxysmal auricular fibrillation for the past three years, these attacks varying in duration from a few minutes to two or three days. He had very little to indicate heart disease, a moderate hypertension, and the circus rhythm that was paroxysmal. This man was a heavy smoker, a moderate user of alcoholics and a very busy executive with heavy responsibilities. The ventricular rate was around one hundred fifty and the electrocardiographic complexes characteristic of fibrillation of the auricles were present.

Quinidine sulphate in doses of three grains at three-hour intervals would restore sinus rhythm in a day or two and with a maintenance dose of three grains daily would maintain normal rhythm; after a time he would neglect the medication and another paroxysm would develop. In this case the persistent daily ration might have maintained a sinus rhythm.

A woman fifty-six years of age with rheumatic heart disease, mitral stenosis and auricular fibrillation had moderate congestive failure, the ventricular rate was 140, with a radial pulse of 60-70, thus giving a pulse deficit of 70-80. This case was digitalized and a maintenance daily dose sufficient to nearly wipe out the deficit kept the patient in a comparatively comfortable state.

These two cases of auricular fibrillation—one paroxysmal treated with quinidine in which normal sinus rhythm was restored, the other permanent auricular fibrillation in which no effort was made to restore sinus rhythm—illustrate the present-day conception of the management of this condition. After auricular fibrillation is permanently established, the patient will feel better with the action of digitalis and the arrhythmia than with the action of quinidine and will not be exposed to the danger of a possible embolism which may occur following the administration of this drug. If there is much heart disease, digitalis; if there is little heart disease, quinidine.

Coronary Artery Disease. The incidence of angina pectoris and coronary thrombosis has markedly increased during the past gen-

eration. Austin Flint, who lived during the period of 1812-1866 and was a national figure in the field of heart disease, encountered no cases of angina pectoris during a period of five years.

Paul D. White has this to say on the subject: "My own recent experience of encountering one hundred new private patients with undoubted angina pectoris within eight months, and as many as three new cases in a single day, has made me believe the situation is appalling and demands some action on our part. Almost certainly the most effective move that we can make is to call a halt on the world's mad rush of to-day."

A patient sixty years of age with occasional attacks of angina for the past two years, these attacks were relieved by nitroglycerin, then the attacks became more frequent, as many as ten in twenty-four hours and with some nocturnal attacks. The Xanthine derivatives were prescribed, more specifically Theominal. This was followed by almost complete relief of the attacks for several months. The patient was elated, he could carry on his usual activities with comfort, when suddenly a severe seizure which required morphia one-fourth grain, then another quarter, and another, and still another before the condition became bearable. He was pale, sweating and with a marked fall in blood pressure. There was no question as to the diagnosis, the patient had a coronary thrombosis. This is a tragedy that is being enacted all too frequently. Our armamentarium to combat this condition of coronary artery disease has been greatly improved during the past few years. The Xanthine derivatives which presumably cause an increased coronary flow have been the most valuable therapeutic addition. Electrocardiographic studies of fatal cases of coronary thrombosis indicate that the fatal termination is often preceded by ventricular fibrillation. Quinidine being the remedy par excellence for ventricular fibrillation had led Lavine to urge the administration of this drug as a routine measure in all cases of coronary thrombosis in an effort to forestall this dangerous arrhythmia.

An old remedy, the remedy our predecessors relied on for the relief of angina before the advent of the nitrates, is being reborn and its value is being appreciated more and more.

I refer to the spirituous liquors and more especially whiskey. This may be used as a daily ration and also given during the attack.

Heberden, who first described angina pectoris in 1786, and it was a classical description which has not been improved on in a century and a half, has this to say regarding treatment: "With respect to the treatment of this complaint, I have little or nothing to advance; nor, indeed, is it to be expected that we should have made much progress in the cure of a disease which has hitherto hardly had a place or a name in medical books. Quiet and warmth and spiritous liquors help to restore patients who are nearly exhausted and to dispel the effect of a fit when it does not soon go off."

Surgery has in recent years done its bit for intractable angina. Sympathectomy, alcohol injections and more recently total thyroidectomy have been used successfully on selected cases. Experience is not yet ripe enough to properly evaluate their true place and benefit.

SUMMARY

Attention has been called to the high inci-

dence and high mortality from heart disease; this also implied a high morbidity.

Maine finds itself in an unsatisfactory situation as standing fourth in the list of the States having the highest mortality from heart disease.

The highest mortality from heart disease is now reached in the seventh decade of life.

The importance of an accurate diagnosis is stressed.

The present-day conception of heart disease is to stress the underlying pathology, rather than valve conditions with their resultant murmurs.

Attention is called to the necessity of differentiating auricular from ventricular tachycardia.

The routine and indiscriminate use of digitalis in all types of heart disease is decried.

Attention is called to the use of digitalis and quinidine in fibrillation of the auricles and their indications pointed out.

Attention is called to the alarming increase in coronary artery disease.

The newer approach to intractable angina pectoris by surgical methods is briefly commented on.

Rabies in Maine

By GEORGE H. COOMBS, M. D., Augusta, Me.

During the year 1933, the State Bureau of Health had 105 animals under observation, and 62 cases of rabies among dogs and sheep, with 26 persons, about equally divided between adults and children, requiring preventive serum.

Apparently this outbreak originated with a dog that was brought into the state in late November by a hunting party from out of the state.

The majority of the cases in 1933 occurred in 15 towns in the central part of the state. The focus of infection, however, was in a group of five towns. The other towns were involved through dogs running to them and being killed there as a result of their mad flight. There was also a minor outbreak in York County, which could not be connected,

by us, with the cases in the middle of the state. Quarantine was put on the towns involved and no further cases occurred after the five in that section. The last three months of the year there was a hang-over of the 1933 outbreak that came to us early in 1934. This resulted in our having to do with six cases in January, one in February, three in March and one in April.

On May 27 a report was made of the disappearance of a dog who had broken out of a garage, where it was confined in the night, and disappeared. Incidentally this dog has never been heard of. It had begun the day before in affectionate slobbering of the faces and hands of 14 children and a man, and the biting of three cows. One, at least, and probably two, of the latter surely were infected.

Investigation at this time developed that in March, foxes in several instances had gone into the yards where dogs were playing, and had begun with a battle or with very friendly attitude toward the dogs, followed by a row. This was usually followed, in course of time, by a story of these dogs having been shot because of symptoms which were very much like rabies.

Laboratory confirmation of this infection did not occur until July 16 when the National Institute of Health reported finding Negri bodies in the brain of a fox which had been killed on July 13 by the side of the road. The first laboratory confirmation on the brain of a dog was on July 27, which was a St. Bernard which had bitten a man, causing his death twenty-three days later.

The story of this particular dog is: that on March 20, a fox bit a dog, which, in course of time, bit the St. Bernard. This dog bit his master the night before his brain storm, the man having treatment and not showing, up to now, any symptoms of infection. The other man bitten by the St. Bernard had symptoms, on the 21st day, of a nervous character with some numbness and prickling in the arm affected. He was bitten in the lateral chest wall and also three times on his bare left arm. He died 23 days later. Morphine failed to give this man much relief, but when in addition Avertin was given he became quiet and rested comfortably for 24 hours, when it was again necessary to administer it. An autopsy was had and material from the man's brain was sent to the National Institute of Health Laboratory at Washington, with a report of death from rabies. A later report stated that one guinea pig inoculated from this material died in 19 days and another in 25 days, both showing Negri bodies. So that the infection from a fox to one dog, from that dog to another dog and from that dog to a man, and then from the brain of the man to guinea pigs, gives a complete story of infection and laboratory proof.

The difficulties of controlling this condition have been about as they were in 1933. One June 1, because of suspicions aroused by the disappearance of the first dog, three towns were quarantined and then later a fourth and fifth town were added to the quarantined towns.

The usual proportion of criticism, from those who know nothing about the situation, has prevailed, but we feel sure that there have been at least 15 rabid foxes and 7 rabid dogs from March until the present time, in an area five by eight miles. It is most interesting that these dogs and foxes have apparently been confined in this small area and we have not had any suspicions that they had gone outside of the territory, because instead of these dogs running away from their homes they apparently all ran into the area, except for the first dog which disappeared and caused, and still causes, us a good deal of speculation and worry.

The Department of Inland Fisheries and Game joined with us in every effort to reduce the advances of this infection, and in conference with federal authorities from the Federal Game Division of the Department of Agriculture, received the advice of an agent from that Department, whose occupation is the destruction of predatory animals in order to prevent infection, which has been necessary in quite a number of western states. Prompt action by the State Fish and Game Department in this area has resulted in the reduction of the underground population in the area, and by the first of October we were feeling much encouraged because of the apparent control of the infection.

However, this was a little premature, for on the 4th of October, a fox ran into a yard and was chased by the family dog over the town line into a nearby town and killed. Report from its brain from Washington indicated that the fox was a victim of rabies, and a later report from the National Institute of Health at Washington states that a guinea pig inoculated with material from this brain died a few days later with typical lesions of tularemia and that culture from this guinea pig's blood yielded a pure culture of bacterium tularensis and that six guinea pigs inoculated with the spleen and lymph glands of this pig died of tularemia and yielded tularensis on culture. This contradicts the idea that the red fox is immune to tularemia. This was followed by the close quarantine of dogs in the town where the owner of the dog lives.

This has resulted in some unhappiness on the part of hunters, and perhaps unhappiness

among the owners of dogs that have been in quarantine, because it would not allow them to roam as they pleased. Yet the dog whose owner has it under the complete control of quarantine would only be exposed to infection by rabid dogs or other rabid animals, like the foxes, invading his domain. Instead of this, if such dogs were allowed to hunt, no knowledge might be had of their being bitten by mad foxes in their hunting activities and the vicious circle would be continued.

Up to the present time the fox, 3 cows and a calf are the only animals, besides the dog, that have been found to be rabid in this area.

An interesting event was a bobcat standing by the side of the road, passed by a truck driver, who found it in the same place an hour later and hunted it into the bushes. He then went home, got a gun and came out and shot the bobcat. This bobcat's brain was sent to the National Laboratory at Washington, but a report of the inoculation into a guinea pig has not yet been received.

Regularly on Saturdays, for several months, brains of the weekly "catch" of foxes (which brains have been kept refrigerated) are shipped to Washington packed in dry ice, and are examined, and other animals inoculated to determine if they are infected. This, however, takes time. We do feel that the extermination of foxes in the area has been quite thorough.

The rather extensive experience in 1933 has developed, with the State Health workers, a feeling that they must guard themselves against too early releasing of quarantine of these animals because of the varying periods of incubation which have been found to exist in bitten animals. How much of this may occur with foxes, we do not know, but the State Bureau of Health is watching every development and hopes that in time this menace to our wild life, and happiness of our people, may be relieved.

Abstracts

"Acute Cholecystitis: A Study of Seventy-Five Proven Cases with Subsiding or Subsided Clinical Manifestations at the Time of Operation"

ARTHUR S. W. TOUROFF, M. D.

Annals of Surgery, Vol. 99:6

This investigation arose as a result of experiences encountered in several cases of acute cholecystitis of severe grade in the presence of subsiding or subsided clinical manifestations at the time of operation since in the majority of cases once the clinical course begins to subside or has subsided, it is assumed that the acute inflammatory reaction has paralleled this course.

This author feels that such an assumption is not infrequently erroneous. He investigated two groups: (1) after clinical manifestations of an acute attack had become minimal (2) after they had disappeared. A total of 429 cases of cholecystitis were selected and 75 were finally chosen because of a proven pathological diagnosis. Of these 23 had minimal clinical evidence, and 52 had been entirely free of clinical evidence at time of operation. In the former group (23 cases) pathological states of all degrees from acute inflammation to gangrenous perforation were found, even as long as 25 days after the acute attack, while the latter group (52 cases) showed the same range of pathology and duration after subsidence of the attack. In the whole group of 75 cases, one-fifth were considered to have progressive lesions while the rest were subsiding or considered capable of doing so. In general, the patients with minimal

manifestations at the time of operation show a considerably higher percentage of advanced and progressive lesions than the group without manifestations at the time of operation. In the case of acute cholecystitis, if subsidence once begun does not proceed uninterruptedly, fairly promptly, and completely, early operation is indicated, whereas in cases with subsided clinical manifestations, operation, early, rather than late in the "interval," is indicated.

D. H. D.

"Carcinoma of the Larynx: An Analysis of Fifty-Eight Cases with Treatment by Laryngofissure"

CLERF

Archives of Otolaryngology, June, 1934

In the author's series treated by laryngofissure the rate of recurrence was 18.6%, 35 cases being free from recurrence for three or more years. Surgical treatment to be effective must completely remove the growth and must be undertaken early. Successful results depend upon early diagnosis. Untreated cases have an expectancy of approximately two years. Too often the laryngologist sees the case when hopelessly advanced and usually valuable time has been lost in treatment for chronic laryngitis on a presumptive diagnosis without laryngeal examination. Every case of hoarseness should have a careful laryngeal examination to rule out malignancy.

F. T. H.



The President's Page

TO THE MEMBERS OF THE MAINE MEDICAL ASSOCIATION :

This being the month of November, the President of these United States, by proclamation, will set aside one day as a Day of Thanksgiving for the manifold and bountiful blessings of the past year. This is as it should be, for most of us have much for which to be eternally grateful.

Viewed from another angle, there is no time within my memory during which the medical profession has been berated so severely and consistently by individuals and the press, and at the same time expected smilingly, yes, even commanded, to do so much work gratuitously as during this same period of time. Aspersions have been cast upon us and attempts have been made to destroy confidence in us, as a profession, to a degree that is likely to be fraught with serious consequences to our lay friends, if it is continued.

Among this welter of mouthings, and innuendoes and downright misrepresentations of medicine and its aims, it is refreshing and gratifying to find one large daily newspaper that dares, with splendid courage, to state the case for the doctor.

As a message of encouragement and cheer I send you, at this Thanksgiving Season, the following statement from the *Cleveland News*. May I entitle it, "Let's try paying the doctor first for a while—he can endure the shock":

"A health journal devotes a page to discussing the question of why the doctor's bill is always the last to be paid.

"It shows a picture of a typical American family going over its accounts at the end of the month, calling its budget balanced because all of its bills 'except the doctor's' will fit in.

"The depression has served, as nothing else, to stress the prime injustice of making the doctor take it coming and going when times are hard and money is scarce.

"The doctor's services are needed just as much in bad times as in good, and are as cheerfully rendered.

"The doctor, in justice to humanity and the dictates of his high calling, cannot refuse to be of aid when needed. Yet in hard times he must suffer the loss of returns on his own investments, perhaps go through a bank failure or two, and assume other people's financial burden on top of his own by carrying the majority of his patients 'on the books.'

"The doctor can't take away the baby because the installments cease to be paid. He can't foreclose on our families, or shove us back into our previous state of bad health because we are unable, or refuse, to pay him. He can't put a cash and carry sign over his door.

"He wouldn't if he could. His philosophy is all against it.

"His life story is one of service, of making other people happy, no matter how down in the mouth he may feel himself. He must be a good actor when he approaches his patient, especially the very young patient who so often needs him. He must 'sell' health and recovery and the principles of right living.

"Yet at heart he is neither an actor nor a salesman.

"The world knows him for a kindly, sympathetic, unselfish human being, working day and night, who sees so much of suffering that he enjoys the thrill of the true craftsman in seeing his efforts yield results in health and happiness.

"Each of us would consider himself very shabbily used if the doctor would turn to our aid only after he had seen to everything else that had a claim on him. Yet all too often we let the doctor worry about his taxes, his rent, his car, his light and gas and telephone bills and the expenses of his office while we take care of those obligations which most urgently and disagreeably press us.

"Let's budget our household expenses so as to provide in advance a modicum of income for health emergencies and make the doctor as happy as we are when he has done his part and helped put us on our feet, save our lives and our jobs.

"It isn't fair to penalize our best friend for our own failure to install the right kind of home bookkeeping, even though we have become used to it."

E. W. GEHRING.

Necrology

Norman Randolph Cook, Newport, 1870-1934

A war veteran physician and surgeon and for many years a practitioner in Penobscot and Waldo Counties, Norman Randolph Cook died suddenly at his home Saturday, June 30, 1934. He was born July 13, 1870, at Jackson, the son of the late Eli and Sarah Carleton Cook. He studied medicine with local physicians and obtained his degree at the University of Vermont in 1896.

He practiced medicine with great skill and success at Brooks until the outbreak of the great war, when he was the first from Waldo County to volunteer for service.

After his discharge from the Medical Corps with the rank of Major, he continued to serve as a reserve officer and was ultimately promoted to the rank of Lieutenant-Colonel. Following the war he opened practice at Newport, where he has since resided. He was a member of the Penobscot County Medical Society and Masonic Orders and was at one time much interested in the Republican party, being Chairman of the Local Town Committee.

Dr. Cook married in 1900 Miss Mabel Judkins of Newport, and is survived by her as well as by a son and a daughter.

J. A. S.

Charles P. McCabe, North Berwick, 1894-1933

Dr. McCabe of North Berwick, a former member of our Association, died at the Deaconess Hospital, Boston, December 15, 1933. He was the son of Arthur and Louise J. Langille McCabe and was born June 20, 1894, at East Earltown, N. S. He graduated from McGill University in 1919 and practiced in Montreal until 1927, when he established himself at North Berwick. His life was devoted to medicine, but in 1932, feeling sure that his career was limited by an incurable cancer of the stomach, he left North Berwick and acted as Assistant Resi-

dent Physician and patient, as it were, at the same time, at the Norfolk County Hospital, South Braintree, Massachusetts, until feeling sure that his time had come, he became a patient at the Deaconess Hospital, where he died.

This brief tribute to a faithful practitioner of Maine, although late, we print here in testimony of our high opinion of his worth.

Woodbury F. Cleveland, Eastport, 1856-1934

In 1931 Dr. Cleveland received his gold medal from our Association for having practiced medicine for fifty years. Last year his half century of practice in Eastport was celebrated by the Rotary Club, of which he was a charter member. Physicians from all over Washington County attended the event and Dr. Cleveland recalled his adventures from the date of his birth in Skowhegan, February 21, 1856.

He was the son of Samuel Parker and Mary Elizabeth Pratt Woodbury, and graduated from Hahnemann Medical College in 1881.

He died suddenly of heart disease on September 14, 1934. He had not complained of illness before he was stricken and had been calling on patients as usual.

He was a great lover of horses and owned more than one famous trotter in Maine and was often judge for track events in that County.

He married Miss Nellie M. Emery of Skowhegan and is survived by her.

J. A. S.

Announcement

The Radiological Society of North America will hold its next Annual Meeting at the Hotel Peabody, Memphis, Tennessee, December 3-7, 1934. The Medical Profession is cordially invited to attend. Further information may be obtained by addressing the Secretary-Treasurer, Dr. Donald S. Childs, 607 Medical Arts Building, Syracuse, New York.

County News and Notes

Cumberland Portland Medical Club

A regular meeting of the Portland Medical Club was held on Tuesday evening, October 2nd, at the Columbia Hotel. An instructive talk was given by Dr. H. Eugene Macdonald, who took for his subject "Pain."

Alice Whittier, *Secretary*.

Aroostook

The October meeting of the Aroostook County Medical Society was held on Tuesday, the ninth, at Caribou, about twenty members being present.

After a supper at the Vaughn House the members adjourned to the Court House, where the business meeting and program were held.

At the business meeting Dr. F. W. Mitchell gave us a report on the recent Council Meeting which he attended.

It was voted that the Society go on record as in favor of an attempt to apply the physicians and hospital bills in insurance cases as a lien on the settlement. As there has been considerable controversy over the fee schedule and payment of State cases, a committee was appointed to formulate some plan and schedule to submit to the State authorities that would be acceptable to all physicians in the county.

Following the business meeting Doris Davidson, R. N., spoke briefly on "Birth Control" and outlined the work already going on in the county.

Dr. C. I. Swett, Island Falls, was the first speaker on the program and gave a rare and interesting case report of "Interstitial Uterine Hemorrhage" following delivery and which necessitated hysterectomy.

The second case was reported by Dr. H. C. Kimball, Fort Fairfield, who presented X-ray and work-up study of "Carcinoma of the Kidney," a successful nephrectomy and subsequent good health of the patient.

The last speaker was the President, Dr. L. Carter, Presque Isle, who presented a series of X-rays on tubercular patients who had undergone pneumothorax and phrenicotomies; it was an instructive series and showed marked progress in this specialty.

We were glad to welcome a new member, Dr. Maynard Colley of Easton. The meeting was adjourned at 10.30 P. M.

A. T. Whitney, *Sec.*

Kennebec

The meeting of the Kennebec County Medical Association was held at the Augusta State Hospital in Augusta, Thursday, October 25, 1934, afternoon and evening.

A Clinical Session was held at 4.30 P. M., which was presided over by Dr. George W. Alexander, President.

Clinical Program:

1A. Dementia Præcox, Hebephrenic Type, by Dr. Joseph Rheingold.

1B. Manic-Depressive Psychosis, Depressed Phase, by Dr. Rheingold.

2. Dementia Præcox, Catatonic Type, by Dr. Newman.

3. Manic-Depressive Psychosis, Manic Type, by Dr. F. R. Carter.

4. Dementia Præcox, Catatonic Type, by Dr. Harry Elkins.

5. Dementia Præcox, by Dr. Matthias Marquardt.

6. Dementia Præcox, Paranoid Type, by Dr. F. C. Tyson.

6.45 P. M. Dinner.

7.45 P. M. Business Meeting.

Minutes of the last meeting were read and approved.

The resignation of Dr. B. I. Wulff of Waterville was read and accepted.

The applications for membership of Drs. Merriwell Shelton, Augusta, Ivan E. McLaughlin, Gardiner, and Greenleaf H. Lambert, Winthrop, were received and referred to the Board of Councilors.

The following committee on Resolutions were appointed for the members who had recently died:—

Drs. Badger and Herring of Winthrop for Dr. Ralph W. Bicknell, who died June 7, 1934.

Drs. Campbell and O'Connor of Augusta for Dr. W. H. Harris, who died June 13, 1934.

Drs. Bull and Farrell of Gardiner for Dr. Wallace N. Price, who died June 16, 1934.

Drs. Stubbs and Turner of Augusta for Dr. Hartwell Frederick, who died July 23, 1933.

The following papers were read:—

"Dementia Præcox," by Dr. F. R. Carter.

"Review of Criminal Observation Cases," by Dr. F. C. Tyson.

Dr. E. W. Gehring of Portland, President of the Maine Medical Association, spoke briefly relative to the collection of the 1935 dues, stating that the by-laws would be enforced and all members whose dues are not paid by April 1st would be suspended and their names reported to the American Medical Association. He also spoke relative to a proposed collection plan for the Maine physicians which is controlled by George S. Burkett of Portland. A committee of three members, composed of Dr. George Campbell of Augusta, Dr. J. O. Piper of Waterville and Dr. A. B. Libby of Gardiner, was appointed by the president to report at the next meeting relative to the approval of a medical credit report book to be edited by Mr. Burkett. Dr. Gehring advised the members as far as possible to take out their malpractice insurance with one company, in order to get a lower rate of insurance. He advised the Loyalty Group, which was composed of the Commercial Casualty Company and the Metropolitan Insurance Company, of which Harold F. Scott of Bangor is the general agent.

The meeting was very interesting and well attended.

There were 26 members present and 9 guests. Total 35.

Respectfully submitted,

FREDERICK R. CARTER, M. D.,
Secretary.

Oxford

A regular meeting of the Oxford County Medical Association was held at Rumford, Maine, Tuesday, October 9, 1934.

The afternoon session was at the Rumford Community Hospital, where clinics were held from

three to four o'clock. The regular meeting was then held and many interesting subjects were discussed. We were very fortunate to have Dr. Gehring, President of the Maine Medical Association, at this meeting.

Dr. Johnson L. Bean of Norway, Maine, was elected to membership.

At 6.30 P. M. a dinner was enjoyed at Hotel Harris, after which Dr. Gehring spoke on matters of general interest.

Dr. George Burgess Magrath, Boston, Medical Examiner in Suffolk County and Professor of Medical Jurisprudence in Harvard Medical School, was scheduled to address the group, but was forced to abandon his trip at Portland because of sickness.

The evening session was greatly appreciated.

About fifty members and guests were present.

J. S. STURTEVANT, *Sec.*

Joint Meeting Penobscot-Hancock Counties

On Tuesday night, September 11, 1934, was held the annual Penobscot-Hancock Counties Medical Society Joint Meeting, at the Club House, Lucerne-in-Maine.

A special "indoor clinic" was arranged and occupied the interest of all from 5.00 to 6.30 P. M. During this many interesting cases were observed and discussed.

At 6.30 P. M. activities were opened in the main dining room and all enjoyed a delicious dinner, various instrumental selections being rendered between courses.

About 8.15 P. M. we re-assembled and were glad to welcome President E. W. Gehring as a guest. Dr. Gehring spoke very feelingly relative to the fleeing of physicians which has been practiced by numerous collection agencies. He also spoke relative to the potential legislative measures for the protection of physicians, surgeons and hospitals who have the misfortune to sacrifice a great deal of time in caring for injury cases—which of late have been increasingly non-pay cases—although the injured parties may have collected from insurance companies for their hospital and medical or surgical expenses.

President-elect J. L. Johnson also spoke briefly but most sincerely about the actual importance of continuing to invade the legislative bodies, each successive session, urging strongly the passage of a bill whereby hospitals and the medical profession may some day hope to collect for their services in accident cases which are everywhere classed as emergencies.

The speaker of the evening was Forrest B. Ames, M. D., Roentgenologist at the E. M. G. Hospital. His subject was X-ray and Its Relation to Medicine. With tact and brevity Dr. Ames touched upon the development of the X-ray proper, mentioned its gradual but progressive advancement and increased usefulness, and then, by a group of well-chosen series of plates, illustrated many common X-ray findings which were consistent with the clinical diagnosis. His timely talk brought out another point of unsuspected pathological findings which follow-up plates of some related or unrelated system might show, this latter beautifully illustrating the point that one pathological finding, in a person who is ill, should not be the

signal for a cessation of investigation. His talk was one of genuine value to us all.

About 50 physicians and guests were present.

RAYMOND E. WEYMOUTH,
Sec., Hancock County.

H. C. SCRIBNER,
Sec., Penobscot County.

Washington

The Annual Meeting of the Washington County Medical Society was held at the cottage of Dr. John A. McDonald, on the shore of Gardner's Lake, East Machias, October 24, 1934.

An excellent dinner was served by Mrs. McDonald and after a smoke talk, the meeting was called to order at 2.30 P. M. by the Vice-President, Dr. John F. Hanson of Machias. Minutes of the last meeting were read and approved. Dr. E. W. Gehring of Portland, President of the Maine Medical Association, spoke on "Collection Agencies." He stressed the unsatisfactory results obtained in connection with both out-of-state and local agencies, finally advocating the formation and use of the Medical Auditing Counsel of Maine, which is now active in Cumberland County. Dr. Gehring also spoke briefly on "Birth Control." A spirited discussion was carried on by Drs. E. H. Bennett, H. H. Best, W. H. Eunker and O. F. Larson. Dr. Miner spoke at length on Dr. Gehring's paper and the State Hospital allowance for indigent patients.

Dr. H. S. Everett of St. Stephens, N. B., gave a very fine paper on the histology of the blood and the "Schilling" differential blood count and its clinical significance. Dr. John F. Hanson of Machias then read a very clean-cut, concise paper on "Coronary Thrombosis" and its differential diagnosis from diseases with which it is most apt to be confounded; discussion followed each paper. After a short recess a business meeting was held and the following officers were nominated and duly elected: President, Dr. P. J. Mundie, Calais; Vice-President, Dr. H. H. Best, Pembroke; Sec.-Treas., Dr. O. F. Larson, Machias; Censors, Drs. I. E. Dyas, Eastport; J. W. Crane, Woodland; H. H. Best, Pembroke. Delegate to the 1935 annual Maine Medical Association meeting, Dr. O. F. Larson, Machias; Alternate, W. N. Miner, Calais.

Dr. John Metcalf of Machias was elected a new member.

The Secretary was requested to send a resolution of respect and sympathy to the late Dr. Cleveland's widow and cause such resolution to be spread upon the records of this Society.

It was voted to have Dr. J. A. McDonald, our State Senator, ascertain what is to be done about indigent patients receiving hospital care in this County.

It was moved to notify the State Society that we favor presentation of the so-called "Lien Bill" by a competent lawyer.

There were 16 members and 5 visitors present.

O. F. LARSON, *Secretary.*

For Sale

Cheap for cash. Two diathermy machines, one galvanic battery, one colonic irrigating apparatus, drugs, surgical instruments, and medical library. All in good condition.

Mrs. W. H. Harris
68 Grove St.,
Augusta, Maine.

Members of the Maine Medical Association

ANDROSCOGGIN COUNTY

Andrews, S. L.,	Lewiston
Beliveau, Romeo A.,	Lewiston
Bernard, Romeo A.,	Lewiston
Bolster, William W.,	Lewiston
Brien, Maurice,	Lewiston
Buker, Edson B.,	Auburn
Busch, John J.,	Mechanic Falls
Call, Ernest V.,	Lewiston
Cartland, John E.,	Auburn
Chaffers, William H.,	Lewiston
Chenery, Frederick L., Jr.,	Monmouth
Cunningham, Charles H.,	Auburn
Desaulniers, George E. D.,	Lewiston
Desaulniers, Lucy O'C.,	Lewiston
Dionne, Maurice,	Brunswick
Dupras, Joseph E.,	Lewiston
Fahey, William J.,	Lewiston
Garcelon, Harold Webb,	Auburn
Gauvreau, Horace L.,	Lewiston
Gerrish, Lester P.,	Lisbon Falls
Giguere, Eustache N.,	Lewiston
Goldman, Morris E.,	Lewiston
Goodwin, Ralph A.,	Auburn
Gottlieb, Julius,	Lewiston
Grant, Alton, Jr.,	Auburn
Greene, Merrill S. F.,	Lewiston
Gross, L. C.,	Lewiston
Hanscom, Oscar E.,	Greene
Harkins, Michael J.,	Lewiston
Haskell, William L.,	Lewiston
Hiebert, Joelle C.,	Lewiston
Higgins, Everett C.,	Lewiston
Hutchins, G. H.,	Auburn
Langelier, Eugene H.,	Lewiston
Leathers, Enoch,	Auburn
Leonard, Christina,	New York City
Marian, Joseph C.,	Lewiston
Miller, Hudson R.,	Auburn
Mitchell, R. L.,	Waterville
Murphy, D. Jerome,	Lewiston
O'Connell, George B.,	Lewiston
Peaslee, Clarence C.,	Auburn
Pelletier, Joseph J.,	Lewiston
Peters, Anthony E.,	Lewiston
Pierce, Edwin F.,	Lewiston
Plummer, Albert W.,	Lisbon Falls
Pratt, Harold S.,	Livermore Falls
Rand, Carlton H.,	Lewiston
Rand, George H.,	Livermore Falls
Renwick, Ward J.,	Auburn
Roy, Leopold O.,	Lewiston
Russell, Blinn W.,	Lewiston
Russell, Daniel F. D.,	Leeds
Scannell, Joseph W.,	Lewiston
Schneider, George A.,	Lewiston

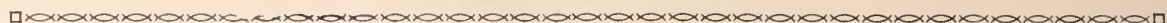
Sprague, Oliver A.,	Turner
Sprince, Henry,	Lewiston
Sweatt, Linwood,	Philadelphia, Pa.
Twaddle, G. W.,	Auburn
Wakefield, Frederick S.,	Lewiston
Webber, Wallace E.,	Lewiston
Williams, James A.,	Mechanic Falls
Wiseman, Robert J.,	Lewiston

HONORARY MEMBER

Norton, Charles E.,	Lewiston
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AROOSTOOK COUNTY

Albert, Joseph L.,	St. Francis
Bennett, Freeman E.,	Presque Isle
Blossom, Frank O.,	Caribou
Boone, Storer W.,	Presque Isle
Brown, Melvin J.,	Mars Hill
Carter, Loren F.,	Presque Isle
Chamberlain, William G.,	Fort Fairfield
Colley, Maynard,	Easton
Curtis, Alton K.,	Danforth
Damon, Albert H.,	Limestone
Dickison, Thomas S.,	Houlton
Doble, Eugene H.,	Presque Isle
Dobson, H. L.,	Presque Isle
Donovan, Joseph A.,	Houlton
Ebbett, Penry L. B.,	Houlton
Faucher, Francois J.,	Grand Isle
Gibson, William B.,	Houlton
Graves, Richard A.,	Presque Isle
Gregory, Frederick L.,	Caribou
Griffiths, Eugene B.,	Presque Isle
Grow, Willam,	Presque Isle
Hagerthy, Albert B.,	Ashland
Hammond, H. H.,	Van Buren
Harmon, Charles H.,	Caribou
Hogan, Chester F.,	Houlton
Huggard, Leslie H.,	Limestone
Jackson, Frank H.,	Houlton
Kimball, Herrick C.,	Fort Fairfield
Kirk, William V.,	Eagle Lake
MacDougal, William A.,	Westfield
Mitchell, Frederick W.,	Houlton
Norell, Oscar,	Caribou
Potter, John G.,	Houlton
Savage, Richard L.,	Fort Kent
Sincock, Wiley E.,	Caribou
Small, Harold E.,	Fort Fairfield
Somerville, Wallace B.,	Mars Hill
Swett, Clyde I.,	Island Falls
Tarbell, Frank W.,	Smyrna Mills
Thomas, Charles F., Jr.,	Caribou
Upton, George W.,	Sherman
Ward, Parker M.,	Houlton
Whitney, Arthur T.,	Houlton



HONORARY MEMBERS

Ipham, George C.,	Biddeford
White, William W.,	Houlton

CUMBERLAND COUNTY

Abbott, Edville G.,	Portland	Geer, George I.,	Portland
Abbott, Edward S.,	Bridgton	Gehring, Edwin W.,	Portland
Allen, John H.,	Portland	Getchell, Ralph A.,	Portland
Anderson, William D.,	Portland	Gilbert, Frank Y.,	Portland
Austin, Lewis K.,	Portland	Gordon, Charles H.,	Portland
Barker, Nat B. T.,	Yarmouth	Gould, Arthur L.,	Freeport
Bates, George F.,	Yarmouth	Gray, John E.,	Portland
Beach, Sylvester J.,	Portland	Greco, Edward A.,	Portland
Beck, Henry W.,	Gray	Gregory, Earle P.,	Fryeburg
Bickmore, Harold V.,	Portland	Hall, Earl S.,	Portland
Bishoffberger, John M.,	Naples	Hamblen, Howard,	South Windham
Bishop, Lloyd W.,	Portland	Hamel, John R.,	Portland
Blaisdell, Elton R.,	Portland	Hamilton, Virginia C.,	South Harpswell
Blake, James P.,	Harrison	Haney, Ormel E.,	Portland
Bradford, William H.,	Portland	Hanlon, Francis W.,	Brunswick
Bramhall, Theodore C.,	Portland	Hanson, Henry W., Jr.,	Cumberland Center
Brock, Henry H.,	Portland	Haskell, Alfred W.,	Portland
Brown, Luther A.,	Portland	Hatch, Lucinda B.,	Portland
Brown, Stephen S.,	Portland	Hawkes, Richard S.,	Portland
Burrage, Thomas J.,	Portland	Hay, Walter F. W.,	Portland
Carmichael, Frank E.,	Portland	Heifetz, Ralph,	Portland
Casey, William L.,	Portland	Hills, Louis L.,	Westbrook
Caswell, Charles O.,	Portland	Holt, Eugene E., Jr.,	Portland
Center, Ervin A.,	Steep Falls	Holt, William,	Portland
Clark, Ralph H.,	Massillon, Ohio	Howard, Harvey,	Freeport
Clarke, Chester L.,	Portland	Hunt, Charles H.,	Portland
Cleveland, Heber H.,	Portland	Huntress, Roderick L.,	South Portland
Clough, Dexter J.,	Portland	Jamieson, James G. S.,	Portland
Cragin, Charles L.,	Portland	Johnson, Henry P.,	Portland
Cummings, Edson S.,	Portland	Johnson, Oscar R.,	Portland
Cummings, George O.,	Portland	Knight, Charles S.,	Portland
Curtis, Harry L.,	Portland	Kupelian, Nessib S.,	West Pownal
Daniels, Donald H.,	Portland	Lamb, Frank W.,	Portland
D'Arche, Albert A.,	Westbrook	Lamb, Henry W.,	Portland
Davis, Harry E.,	Portland	Lappin, John J.,	Portland
Davis, John L.,	Portland	Leighton, Adam P., Jr.,	Portland
Derry, Louis A.,	Portland	Levine, Harry,	Portland
Dooley, Francis M.,	Portland	Little, Albion H.,	Portland
Dorsey, Frank D.,	Portland	Lombard, Reginald T.,	South Portland
Douphinett, Otis J.,	Portland	Lothrop, Eaton S.,	Portland
Drake, Eugene H.,	Portland	Love, Robert B.,	Gorham
Drummond, Joseph B.,	Portland	Macdonald, H. Eugene,	Portland
Elliott, Gilbert M.,	Brunswick	MacVane, Ernest F.,	Portland
Emery, Harry S.,	Portland	Mannix, Daniel H.,	Portland
Everett, Harold J.,	Portland	Marshall, Bertrand F.,	Westbrook
Fagone, Francis A.,	Portland	Martin, Thomas,	Portland
Ferguson, Franklin A.,	Portland	McAdams, William R.,	Portland
Fickett, Jerome P.,	Naples	McAleney, James L.,	Portland
Files, Ernest W.,	Portland	McCrum, Philip H.,	Portland
Fisher, Stanwood E.,	Portland	McDonough, Edward J.,	Portland
Folsom, Ernest B.,	Portland	Meisenbach, Roland O.,	Portland
Foss, Clarence W. P.,	Brunswick	Melnick, Jacob,	Portland
Foster, Benjamin B.,	Portland	Miller, Thor,	Westbrook
Foster, Thomas A.,	Portland	Milliken, Herbert E.,	Portland
Freeman, William E.,	Yarmouth	Mitchell, Alfred, Jr.,	Portland
		Moore, Roland B.,	Portland
		Moran, William,	Portland
		Morrison, Alvin A.,	Portland
		Moulton, Albert W.,	Portland
		Mulford, Arnold E.,	Portland
		Needelman, William R.,	Portland

Nichols, Estes,	Portland
O'Donnell, Eugene E.,	Portland
Oram, Julius C.,	South Portland
O'Sullivan, Timothy J.,	Portland
Parker, Charles F.,	South Windham
Parsons, Neil,	Damariscotta
Patterson, H. J.,	Portland
Peaslee, C. Capen, Jr.,	Portland
Pepper, John L.,	South Portland
Peters, Clinton N.,	Portland
Pingree, Harold A.,	Portland
Pletts, Robert C.,	Brunswick
Poore, Leland H.,	Crescent Lake
Powell, Lester L.,	Portland
Pudor, Gustav A.,	Portland
Richardson, Clyde E.,	Brunswick
Ridlon, J. R.,	Portland
Ridlon, Magnus G.,	Kezar Falls
Robinson, Carl M.,	Portland
Robinson, Edward F.,	Portland
Rowe, Daniel M.,	Portland
Ruhlin, Carl W.,	Portland
Sawyer, Samuel G.,	Cornish
Shanahan, William H.,	Portland
Skillin, Waldo T.,	South Portland
Small, Hermon W.,	Portland
Small, Richard D.,	Portland
Smith, Frank A.,	Cumberland Mills
Smith, Owen,	Portland
Smith, Wendall D.,	Harrison
Stetson, Elbridge G. A.,	Brunswick
Stevens, Theodore M.,	Portland
Stuart, Albert F.,	Portland
Swift, Henry M.,	Portland
Sylvester, Charles B.,	Portland
Tabachnick, Henry M.,	Portland
Tetreau, Thomas,	Portland
Thaxter, Langdon T.,	Portland
Thompson, Philip P.,	Portland
Tibbetts, George A.,	Portland
Tobie, Walter E.,	Portland
Upham, Roscoe C.,	Biddeford
Vosburgh, Stephen E.,	West Pownal
Walker, Maibel Holt,	Portland
Warren, Mortimer,	Portland
Webber, Isaac M.,	Portland
Webber, Millard C.,	Portland
Webster, Fred P.,	Portland
Weeks, DeForest,	Portland
Welch, Francis J.,	Portland
Wescott, Clement P.,	Portland
Wheet, Fred E.,	Westbrook
Whitney, Harlan R.,	Portland
Whittier, Alice S.,	Portland
Wilson, Clement S.,	Brunswick
Woodman, Daniel N.,	North Haven
Woodman, George M.,	Westbrook
Woolf, Joseph R.,	Portland

HONORARY MEMBERS

Bowers, John W.,	Portland
Devereux, Frank G.,	Portland
Dunn, Bertrand F.,	Portland
Hale, Leon L.,	South Portland
Moulton, Willis B.,	Portland
Spalding, James A.,	Portland
Twitchell, Herbert F.,	Portland
Warren, Stanley P.,	Portland

FRANKLIN COUNTY

Arms, Burdett L.,	Farmington
Bell, Charles W.,	Strong
Butler, Glenn V.,	Weymouth, Mass.
Colby, F. B.,	Rangeley
Croteau, Thomas,	Chisholm
Currier, Everett B.,	Phillips
Dunlap, Clarence,	Kingfield
Floyd, Albion E.,	New Sharon
Moulton, John H.,	Rangeley
Nichols, John W.,	Farmington
Pratt, George L.,	Farmington
Reed, James,	Bridgton
Ross, Atherton M.,	Farmington
Thompson, Cecil F.,	Phillips
Trefethen, William J.,	Wilton
Wellington, Joel F.,	Wilton
Weymouth, Currier C.,	Farmington
White, Verdeil O.,	East Dixfield

HONORARY MEMBERS

Coburn, George H.,	Rangeley
Perkins, Joseph W.,	Wilton

HANCOCK COUNTY

Babcock, Harold S.,	Castine
Clark, Raymond W.,	Ellsworth
Gray, Philip L.,	Harborside
Grindle, J. Lowell,	Northeast Harbor
Higgins, Royal G.,	Bar Harbor
Holt, Hiram A.,	Winter Harbor
Keyes, Edward L.,	Northeast Harbor and St. Louis, Mo.
Knowlton, Charles C.,	Ellsworth
Leddy, Percy A.,	Northeast Harbor and New Haven, Conn.
Morrison, Charles C., Jr.,	Bar Harbor
Morrison, Elmer J.,	Bar Harbor
Neal, George A.,	Southwest Harbor
Noyes, Benjamin L.,	Stonington
Parcher, Arthur H.,	Ellsworth
Parcher, George,	Ellsworth
Phillips, Joseph D.,	Southwest Harbor
Wakefield, Ralph W.,	Bar Harbor
Wardwell, Melvin A.,	Penobscot
Weymouth, Raymond E.,	Bar Harbor

HONORARY MEMBER

Morrison, Charles C.,	Bar Harbor
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KENNEBEC COUNTY

Alexander, George W.,	Gardiner
Allen, A. B.,	Waterville
Badger, Forrest H.,	Winthrop
Bauman, Clair S.,	Waterville
Bisson, Napoleon,	Waterville
Bourassa, Harvey J.,	Waterville
Boyer, Edward W.,	Waterville
Breard, Joseph A.,	Waterville
Bristol, Leverett D.,	New York City
Bull, Frank B.,	Gardiner
Bunker, Luther G.,	Waterville
Campbell, George R.,	Augusta
Carter, Frederick R.,	Augusta
Cates, Samuel C.,	East Vassalboro
Clason, Silas O.,	Gardiner
Cobb, William O.,	Gardiner
Cole, Fred M.,	Gardiner
Coombs, George A.,	Augusta
DeVeaux, Orwel F.,	Augusta
Fallon, Louis F.,	Augusta
Fish, E. P.,	Waterville
Freeman, Fred H.,	Pittsfield
Gingras, Adolphe J.,	Augusta
Goodrich, Blynn O.,	Waterville
Goodrich, John Pearl,	Waterville
Gousse, W. L.,	Fairfield
Guite, Leander A.,	Waterville
Hardy, Theodore E., Jr.,	Waterville
Hendee, Walter W.,	North Vassalboro
Herring, Leon D.,	Winthrop
Hill, Frederick T.,	Waterville
Hill, Howard F.,	Waterville
Hill, J. Frederick,	Waterville
Hurd, B. P.,	Waterville
Jackson, Elmer H.,	Augusta
Kagan, Samuel H.,	Augusta
Lathbury, Vincent T.,	Augusta
Libby, Ara B.,	Gardiner
Lippert, Frieda E.,	Hallowell
Lubell, M. F.,	Waterville
Mann, L. A.,	Augusta
Marquardt, Matthias,	Augusta
McCoy, Thomas C.,	Waterville
McKay, Roland L.,	Augusta
McQuillan, Arthur H.,	Waterville
Merrill, Percy S.,	Waterville
Moore, Arnold W.,	Mt. Vernon
Morrell, Arch H.,	Augusta
Murphy, Norman B.,	Augusta
Newcomb, Charles H.,	Clinton
Nutting, James D., Jr.,	Hallowell
O'Connor, W. J.,	Augusta
Odiorne, Joseph E.,	Cooper's Mills
Paine, Edward W.,	Waterville
Parizo, Harry L.,	Waterville
Piper, John O.,	Waterville
Pitman, Mason W. H.,	Riverdale on Hudson, N.Y.
Poulin, Joseph E.,	Waterville
Priest, Maurice A.,	Augusta

Rancourt, Charles G.,	Waterville
Reynolds, Ralph L.,	Waterville
Risley, Edward H.,	Waterville
Shaw, Arthur A.,	Clinton
Shaw, John F.,	Fairfield
Simons, Ralph D.,	Gardiner
Small, Morton M.,	Waterville
Stubbs, Richard H.,	Augusta
Totman, Virgil C.,	Oakland
Towne, Charles E.,	Waterville
Towne, John G.,	Waterville
Turner, Oliver W.,	Augusta
Tymms, William R.,	Tenants Harbor
Tyson, Forrest C.,	Augusta
Wakefield, Paul,	Fairfield
Wheeler, Fred E.,	Waterville
Williams, Edmund P.,	Oakland
Wulff, Bernhardt I.,	Binghamton, N. Y.

KNOX COUNTY

Adams, Frederick B.,	Rockland
Apollonio, Howard L.,	Camden
Belknap, Robert W.,	Damariscotta
Brown, F. F.,	Rockland
Campbell, F. G.,	Warren
Carswell, James,	Camden
Coombs, George H.,	Augusta
Ellingwood, William A.,	Rockland
Fogg, Neil A.,	Rockland
Foss, Alvin W.,	Rockland
Fuller, Abbott J.,	Pemaquid
Green, Archibald F.,	Camden
Hall, Walter D.,	Rockland
Hart, Willis F.,	Camden
Hutchins, James G.,	Camden
Jameson, C. Harold,	Rockland
Keller, Benjamin H.,	Thomaston
Laughlin, J. W.,	Newcastle
Leach, Charles H.,	Tenants Harbor
Leijonborg, Frans,	Liberty
North, Charles D.,	Rockland
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News and Notes

Clinical Session of American College of Surgeons

The five-day clinical congress, which some 5,000 surgeons attended in Boston, closed with a convocation and award of fellowship in Symphony Hall. Several distinguished foreign surgeons received honorary fellowship in the college. THE JOURNAL is pleased to announce the following Maine surgeons who were admitted to fellowship: Charles H. Burgess, Bangor; Edwin M. Fuller, Bath; Ralph A. Goodwin, Auburn; Herrick C. Kimball, Fort Fairfield; Eaton Shaw Lothrop, Portland.

Dr. Thomas A. Foster of Portland has accepted the office of medical consultant to the Children's Service Bureau of Portland.

THE JOURNAL noticed a picture of Dr. Stephen A. Fogg of Sanford taken on board the yacht of Governor Dave Scholtz of Florida in company with Governor Brann and other leading Maine Legionnaires who were attending the National Convention of the American Legion in Miami.

Book Reviews

Medicine Marches On, by Dr. Edward Podolsky. This is an interesting book from which the medical reader can soon refresh his memory in regard to the very latest and hopeful discoveries toward national better health. A careful index informs us where to look for anything from "Watermelon Seed" to the "Iron Lung" and the "Radium Bullet." We miss, with regret, any words concerning congenital diaphragmatic hernia, even

if a rarity in the medical or surgical world. The style of the book is attractive and so is the printing and the pagination, which delights us at its genuine position on the outer corners of every page. The paper, too, is very choice, and although we would be glad to go on and add more and more praise to our abstract, we know full well that readers of abstracts do not like those that are too long, much as they are sure to like a book like this, which, by the way, comes from Harper's in their very best format, and with a price that does not pay half what the contents are worth.

J. A. S.

The Fourteenth Edition of Dr. Charles H. May's "Diseases of the Eye," published August last, has reached us. The value of the book is proved by the fact that since our last review British, Spanish, Italian, and other editions in various languages, not forgetting the third Chinese, have appeared in print. This, the fourteenth, with its excellent pictures and ophthalmoscopic illustrations, has reached us for a few remarks of renewed appreciation. Would that it had been our good fortune to issue to the world of ophthalmology a book as useful as this! Its five hundred pages of up-to-date information is brought to a careful ending by an excellent and comprehensive index.

Published by William Wood and Company, Baltimore. Price, \$4.00.

J. A. S.

Rabies

The paper on Rabies, by Dr. Coombs, found elsewhere in this issue, deserves the perusal and careful attention of all of our readers.

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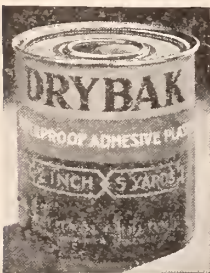
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Relative Values of Carbohydrates Employed in Infant Feeding

Continued down from 1911

1916

"For the addition of sugar, I usually use dextri-maltose, which does not easily cause fermentation."—*L. L. Meininger: Use of Etweissmilch, Arch. Pediat., 33:529-532, July, 1916.*

1916

In the treatment of marasmus, "Three per cent of malt sugar should be administered from the first, afterwards running up to as high a per cent as the child will take."—*L. T. Royster: A Handbook of Infant Feeding, C. V. Mosby Co., St. Louis, 1916, p. 100.*

1916

"Least irritating of all sugars, and more readily digested and quickly absorbed, is maltose."—*H. Lowenburg: A Practical Treatise on Infant Feeding and Allied Topics, F. A. Davis Co., Phila., 1916, p. 73.*

1916

"Dextrin-maltose is valuable in cases where intestinal disturbances are due to fermentation of milk sugar."

"Treatment (of sugar intoxication) consists in eliminating the latter (whey salts) as well as the sugars from the diet temporarily, and when the symptoms have subsided, a different sugar in proper proportion should be cautiously added; maltose and dextrin are preferable, because they are not apt to produce fermentation, while milk sugar is prone to set up fever and diarrhea."—*E. E. Graham: Diseases of Children, Lea & Febiger, Phila., 1916, pp. 179-201.*

1917

"For children who are not gaining on a normal formula with a sufficient amount of sugar of milk, or children who vomit when sugar of milk is fed, or who are constipated, the use of maltose instead of lactose often gives most satisfactory results. This is readily accomplished by substituting for the 4 or 5 per cent. of added sugar of milk an equal amount of dextri-maltose or malted milk, which latter gives, in addition to the maltose, some protein food and an insignificant amount of fat. In many cases children who have failed to gain on other food will immediately show a marked gain as soon as this change is made."—*R. G. Freeman: Elements of Pediatrics, Macmillan Co., New York, 1917, pp. 191 and 192.*

1917

"The carbohydrates most used in infant feeding are the three soluble sugars and starch. The three soluble sugars are lactose, or milk sugar, maltose, or malt sugar, and saccharose, or cane sugar. Maltose is not used in its pure form, on account of its cost. The various commercial preparations of maltose are combinations of maltose with various dextrins, but as in digestion dextrin is converted into maltose, the chemistry is practically the same."

"The sugar which is not absorbed is broken down by the bacteria of the intestine into a great variety of fermentation products, among them being lactic, butyric, acetic, and succinic acids."

"Another effect of the excessive fermentation which results from a relative excess of carbohydrate in the food, is the formation of an excessive amount of gas. This may cause abdominal distention, and, extending backward, it may carry irritating acid products into the stomach, and thus cause vomiting."

"Lactose is the sugar most likely to produce acute symptoms. The stools are practically always green and very irritating. Flatulence and colic are less prominent."

"The maltose-dextrin preparations rarely produce acute exacerbations."—*C. H. Dunn: The Hygienic and Medical Treatment of Children, Southworth Co., Troy, New York, 1917, pp. 423, 424, 425, 428.*

1918

"The sugars in the foods are milk sugar which is found in mother's milk as well as in cow's milk, cane sugar and malt sugar. Though milk sugar is a natural ingredient of milk it is not well borne by babies when added to their food; they digest cane sugar, the ordinary granulated sugar, much better; malt sugar is the easiest digested by babies."—*C. G. Leo-Wolf: Nursing in Diseases of Children, C. V. Mosby Co., St. Louis, 1918, p. 24.*

1918

"Maltose (malt sugar) has the advantage of being very easily digested; when part of the sugar given is maltose, many children gain more rapidly in weight than when only milk sugar or cane sugar is used."—*L. E. Holt: The Care and Feeding of Children, D. Appleton & Co., New York, 1918, p. 66.*

1919

"In the administration of protein milk with its large protein content, by adding to it sugar which is not easily fermented (dextri-

maltose), we produce, instead of pathologic fermentation, a condition of putrefaction which changes the acidity of the intestinal contents to alkalinity, the peristalsis is decreased, the intestinal contents pass slowly through the large intestines with absorption of fluid and excretion of calcium and magnesium salts. These minerals unite with fatty acids to form the typical fat-soap-clay-coloured constipated stools characteristic of protein milk feeding, and it is at this point that dextri-maltose should be added to the food."

"The majority of the cases were kept on protein milk for a period varying from three to four weeks, and, in many instances, contrary to the usual opinion, we were able to keep the children on protein milk plus starch and dextri-maltose, sufficient for their caloric needs for a period of several months, in each instance accompanied by a substantial gain in weight and normal increase in vigor and tissue turgor with comparative freedom from digestive symptoms."—*A. Brown and I. F. MacLachlan: Protein milk powder, Canad. M. A. J., 9:528-537, June, 1919.*

1920

"There are three sugars commonly employed in infant feeding: (1) malt sugar or dextri-maltose, (2) cane sugar, and (3) milk sugar. Malt sugar is the most easily digested and assimilated, cane sugar next and sugar of milk the least so."—*L. O. Frech: The caloric method of artificial feeding in normal babies, Illinois M. J. 38:484-488, Dec. 1920.*

1920

Regarding treatment in disturbed metabolic balance in infants, "The one carbohydrate which seems to give the most satisfactory results in these cases is malt sugar."—*C. H. Seybert: Disturbed metabolic balance in infancy, Hahneman, Monthly, pp. 379-382, June, 1920.*

1921

"Next to woman's milk is cow's milk in simple modification with water and sugar in proper proportions and amount according to the age of the child. Milk Sugar is the most expensive and least satisfactory sugar. Dextri-Maltose is the best sugar."—*A. A. Shawkey: Infant foods and infant feeding, West Virginia M. J. 16:284-287, Feb. 1921.*

1921

With reference to hypotrophy, "In mild cases, the addition of dextrimaltose instead of cane or milk sugar may be sufficient to obtain a gain in weight."—*C. Herrman: The treatment of nutritional disorders in artificially fed infants, New York M. J. 114:158-160, Aug. 1921.*

1921

"Maltose and dextrin compounds are acceptable to the infant's digestion in relatively larger quantities. They are not as sweet as cane sugar. They are of practical value when larger amounts of cane sugar are not well borne."

"The so-called 'Mead's Dextri maltose with Potassium Bicarbonate' is laxative, and in the presence of a stationary weight may be given in larger amounts."—*F. W. Fergusson: A method for the modification of cow's milk, Journal-Lancet, 41:628-629, Dec. 1, 1921.*

1921

For cases of fermentative diarrhea, "... the ideal plan of treatment would be to give a food which is low in sugar (the food which that group of organisms thrive on) and high in protein. Calcium caseinate milk accomplishes this purpose. In our series of cases, we found it was necessary to use the casein calcium for from 5-8 days; we then stopped it and added dextri-maltose to the formula."—*A. G. DeSanctis and L. V. Paider: The value of calcium caseinate milk in fermentative diarrhea, Arch. Pediat. 38:233-236, April, 1921.*

1922

In the treatment of diarrhea, "The sugar is added gradually as conditions admit, some sugar other than milk sugar or cane sugar being used, preferably dextrin and maltose."—*H. E. Small: Diarrhoea in bottle-fed infants, J. Maine M. A. 12:154-158, Jan. 1922.*

1922

"The use of other soluble carbohydrates other than lactose for milk modifications are very good. Some believe the addition of dextrose or dextri-maltose makes the casein curd softer and easier to digest. This is questioned, but all agree that in cases of malnutrition, where the patient is intolerant to lactose and cannot get the benefit needed from the fat in the diet that the dextri-maltose is invaluable as it is the easiest sugar to digest, and can be immediately used for energy production without undergoing further change."—*E. G. Padfield: Remarks on infant feeding, J. Kansas M. S. 22:97-101, April, 1922.*

Continued down to 1934

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Maine MEDICAL JOURNAL



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December, 1934

No. 12

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4. No breed of cows gives the same fat test throughout the year. If a milk does not vary in fat content, it is because the milk has been manipulated. The same is true of all other chemical fractions of the milk, with the possible exception of the mineral content.
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cally bearing on the relative values of milks in infant-feeding." It is simply a case of dispersing the fat globules in such a manner that when precipitation takes place in the stomach the fat globules serve as a physical means of keeping the curd particles from matting.

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9. Modification can only be performed by a milk technologist who is aware of the absolute need for caution and accuracy in each step of milk modification.
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Maine Medical Journal

The Official Organ of
The State and County Medical Societies

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Editorials

Forensic Medicine

The October issue of the *American Journal of Surgery* devotes itself largely to the cause of Forensic Medicine. Two editorials depict the status of Forensic Medicine in the United States and emphasize the importance of a revised and efficient system throughout the country, with the universal establishment of the medical examiner in place of the old coroner.

A survey of hopeful developments is reviewed, commencing with the abolition of the office of coroner in Massachusetts in 1877, with replacement by the Medical Examiner's System. Reference is made to the abolishment of lay Coroners and Coroners' Physicians in New York in 1915; to the endowment of a chair of Legal Medicine in Harvard University in 1932 with the appointment of Dr. George B. Magrath as Professor of Legal Medicine; to the establishment in 1933 of a Department of Forensic Medicine in New York University with the appointment of Dr. Charles Norris, Chief Medical Examiner of New York City, as professor of Forensic Medicine; to the exhibit at the Century of Progress in 1934 under the auspices of the Institute of Medicine of Chicago on the relative merits of the Coroner and Medical Examiner System; to the opening of the

Mallory Institute of Pathology in connection with the Boston City Hospital and the housing therein of the Medical Examiner, Dr. Timothy Leary; to the institution of a session on Forensic Medicine at the American Medical Association in 1934; and to the establishment of the Dr. George Burgess Magrath Library of Legal Medicine at Harvard in 1934. The establishment of a department of Forensic Medicine in this journal with Dr. Charles Norris as editor represents a further advance, with an opportunity for its readers to acquaint themselves with developments in this neglected field.

The imperative need of establishing the exact cause of death becomes more and more apparent under modern conditions demanding accurate data for criminal, civil and compensation courts. In New York City and Essex County, New Jersey, during a year, 20 per cent. of deaths are reported to Medical Examiners, who must sign the certificates with accuracy.

The intensive interest of the laity and the medical profession must be stimulated to bring this very important phase of medicine into the foreground. Efficient medical examiner systems must be universally established. Qualified physicians must be interested and equipped by special training for this work.

The interest of our own Society has resulted in a Medical Examiners' conference in connection with our annual meeting next year. In a sparsely populated state like our own the quantitative importance of the matter may be relatively small, yet from a qualitative point of view Forensic Medicine may not be slighted.

C. H. J.

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"Sickness is a matter intimately personal. It is a time when sincerity of dealing cannot be compromised nor human feelings flouted.

"How disturbing, then, is the thought of having a third person or alien party exercise an influence on the relationship between the patient and his physician, the two persons who, above all others, are most vitally concerned when sickness enters the home.

"Yet this third-party influence, with all its unpleasant and disturbing sequels, will inevitably be thrust upon patient and physician should some of the current new schemes of medical practice ever gain acceptance.

"Carried to their full development, such plans would mean that your family doctor would be the hireling of a commercial organization or of a department of the state, the former built up necessarily by business-promotional efforts, high pressure salesmanship and price competition, the latter made compulsory by legal enactment.

"Experience has already shown that contract or insurance schemes would not be suc-

cessful if they observed carefully the principles of conduct and fair competition which operate as definitely for the public good as for professional honor. In these principles financial gain is subordinated to the prime object of service to the patient and to humanity.

"Furthermore, the history of some of these ventures reveals highly deplorable tendencies. 'Scare head' advertising has appeared as a means of frightening people into subscribing for memberships. Medical service has been promised at ridiculously low and actually impossible rates. The services of hundreds of physicians have been promised to subscribing members, whereas actually but a small fraction of that number were 'signed up' and available. Patients have found that they must be served by the physician assigned to them, not by the man of their choice. And the poorer classes have paid the same price for medical service as the very wealthy.

"No, the fine, sympathetic, humanitarian service at present rendered by the family physician can never be satisfactorily replaced by a commercial organization that retails medical service for a profit, nor by the state with a mechanized or regimented medical profession. The interjection of such agencies between patient and physician is unnecessary and cannot fail to be disturbing to all parties concerned."—From Mead Johnson & Company's Announcement in *Hygeia*, September, 1934.

Editorial Note

The President's Page for December will take the form of a letter to each member.

**Progressive Health Work in Public Schools*

By H. H. CLEVELAND, M. D., Portland, Maine, Member of American Association of School Physicians.

Health work in public schools has changed as much in the last thirty years as has the practice of medicine; from the combating of existent epidemics to the prevention of disease and the teaching of health attributes. Placed first on the list of the major aims of the National Education Association is health. Under this head come the sanitation and hy-

gienic care of school buildings, selection of healthy teachers and training them in health activities, physical examination of pupils and health supervision. A successful health program demands due care and deliberation in the laying out of definite lines of work to be accomplished in a given period of time, as three to five years.

* Read at the annual meeting of the Maine Medical Association, Bangor, Maine, May 29, 1934.

The protection of the health and physical welfare of our school children is a duty and obligation that rests upon the parents of to-day. The leadership and guidance of this work naturally falls upon the physician, because of his training and experience in this field. Health work in public schools, properly conducted, is in no way antagonistic to or competitive with the private practice of physicians nor can it in any way be considered as tending toward social medicine. Manifold cases of physical defects are detected in our school surveys and referred to the family physician, of which neither the family nor physician would otherwise be cognizant. The school physician rarely renders any treatment. When we consider that 90% of all defects located have their origin in the first five years of life, or pre-school age, and that 75% of them can be cured, if taken early, the importance of early recognition and correction becomes manifest. Already health work among children of pre-school age has made a great advance and I fully expect in the not distant future to see a health certificate, signed by the family physician, required of every child entering our public school system.

In these days of hectic chaos, when our whole theory of economics has been shattered, our financial structure has collapsed; our much boasted democracy halted at the crossroads; unemployment, a national calamity; it is no time to quit or even slow up on this work. Rather, as never before, are we called upon to guard the health and welfare of our school children, who are in no way responsible for existent affairs, yet are to be the parents of tomorrow and are to guide this old ship of state. Health is the corner stone in the foundation of success, whether of family, city, state, or nation.

A school health survey consists of the following:

1. The detection of handicaps, physical, mental, emotional, and social.
2. Notification of findings to parents and referring child to family physician or clinic for correction of defects.
3. Of great importance is the follow-up

work by nurse, or other, to see that the child is actually under treatment.

4. Maintaining an actual health record of each child.

5. Teaching of health and measures tending to prevent illness.

I wish now to mention, in brief, some of the health work that has been accomplished in Portland along these lines. Most of this work was started in the midst of this period of depression, has steadily progressed and is now in full swing.

HARD OF HEARING

In 1931 the School Board purchased a 4A audiometer, a portable Snellen Test Card with daylight reflector, and appointed a full-time nurse ably trained for carrying on this work.

The 4A audiometer is a mechanical device whereby forty children may be tested for acuteness of hearing at one sitting. Sound is transmitted by magnetic conduction to the forty ear phones, properly adjusted to the children. Being a mechanical device it is not perfect, but has been accepted generally as the most practical instrument for this work. A sound-proof room would be the ideal place for conducting the tests, a thing not found in public school buildings. However, the most suitable room is selected and all undue noise in corridors and elsewhere is eradicated. Any child showing a loss of nine or more sound units is given a second test. The same loss showing in the retest, a third test is given with parents invited to be present. The family and physician are notified of the defect with request for corrective treatment and a return report. To prove the efficacy of this test, let me cite one school in which thirty-four defects were discovered in March, 1931, and referred for treatment. At the following test in September, 1931, nineteen had normal hearing, nine much improved and still under treatment, while six had a permanent loss of hearing. Over thirty thousand of these tests have been given, the program now calling for the testing of every child in the third, fifth, seventh, ninth, and eleventh grades each year, thereby bringing each child up for a test once in two years.

The success of any undertaking depends upon carrying it through to completion. What about the child with a permanent loss of hearing? Early in 1932 a well-known teacher of lip reading was employed to give a series of ten lectures on the subject of lip reading to a voluntary group of our teachers. The average attendance at these lectures being forty-three, it was decided to go farther and conduct a Teacher Training Course in Methods of Lip Reading to a class of ten teachers. These teachers were certificated and given a diploma. This course has been twice repeated, with the result that today we have twenty-five teachers certificated, who are teaching lip reading to one hundred and ninety-seven pupils having a permanent loss of hearing. A course in lip reading in our high schools not only counts a point toward graduation but enables these boys and girls to take up their life work not impeded by the dismal handicap of loss of hearing. These teachers are most enthusiastic workers, receive no extra pay for this additional load and have formed an organization whereby they may correlate their efforts for mutual assistance. Another course in Teacher Training will be conducted this summer.

CONSERVATION OF VISION

Since February 1, 1931, over thirty thousand tests for acuity of vision have been made. Any defect of 20/40 or more is referred for treatment and report of correction requested. Children needing glasses whose family are financially unable to purchase them are supplied from a fund raised by our local Rotary Club. What about the child who, even with glasses properly fitted, cannot see to read ordinary type? For these we have a Conservation of Vision class outfitted with textbooks of large type, crayons, typewriters, and other supplies especially adapted for this kind of work. Special requirements as to seating, lighting, window shades, blackboards and painted walls are complied with and I assure you we have no room in our school system where our pupils are more happy and contented.

The handicapped child should be segregated as little as possible, as it adds to his embarrassment and tends to discourage rather than encourage him in his efforts to make

good. The hard of hearing child attends all regular class recitations. The children in the Conservation of Vision class are helped in the preparation of their lessons but recite with the regular class as far as possible.

PHYSICAL EDUCATION

Our state law compels all children in the first two grades of our secondary schools to take physical education, but arranges in no way to see that they are examined and physically fit to carry on the required work. Every freshman and sophomore has a physical examination in September. Members of all athletic teams are examined as to fitness for competitive sport and the physician's word is law. We find many children at this age with functional defects which are corrected by graduated, systematic exercise. All cases of organic disease are referred to the family physician. Emergency cases are handled by the school nurse until such time as a physician is in attendance.

MALNUTRITION

Undernourished children are regularly checked up as to height and weight, not that they shall conform to some special chart but to see that they are making reasonable gain in weight. Two open window rooms of twenty-four pupils each serve those children who seem to be most in need of special attention. Here two feedings, one hot, are served and all children have cots and sleeping bags for certain definite rest periods.

TUBERCULOSIS

In January of this year we began a tuberculosis survey through the agency of the Maine Public Health Association, they agreeing to do the work in one school. The North School of thirteen hundred pupils was selected because most of these children come from homes in the tenements and the poorer part of the city. For those who are not familiar with the work of the survey, let me say that the first essential is to arouse public interest by suitable talks given before parents, teachers, and especially the children themselves. Blanks are sent home by the children to be filled in by the parents requesting that their child be given the tuberculin test, as only those can be examined who present these

blanks properly filled out, including the name of the family physician. Three clinics are held during the testing of each group of children, first the skin testing with tuberculin; second, the reading of results on the fourth day followed by the taking of X-rays of the chests of all positive reactors; third, the physical examination of the chests of all cases in whom the X-ray shows possible, positive findings.

Twelve hundred and eighty-nine out of a total of thirteen hundred pupils took the test, which will be a high mark for others to follow. At the second clinic, eleven hundred and eighty were given reports of negative findings to take home to anxious parents, while one hundred and nine showed positive reactions. The X-ray examination of these screened out ninety-one more, whose parents received from the State Association a report of the findings and well-founded advice, leaving eighteen for the third clinic. Parents were notified by personal contact and asked to be present at a specified hour when their child was given an examination by an expert on tuberculosis. Two boys were found to have an active process, one being a lad of fourteen years with the adult type. Both cases were detected early and preventorium treatment is expected to cure them.

The Von Pirquet test is used instead of the Mantoux. While it is not so sensitive as the latter, for testing large numbers of children in school, it has proven the more practical.

The call from pupils, parents, and teachers asking when we are to make the survey in other schools has been so persistent that we are continuing the survey throughout our public schools. To date 4,271 children out of an enrollment of 5,313 pupils have taken the test. The percentage of reactors is 13.6%, the percentage of those attending the third clinic is 1.2%, percentage of positive cases is $\frac{1}{4}$ of 1%. These figures are much lower than those reported in Massachusetts and other states, where the survey has been made, doubtless due to almost entire eradication of bovine tuberculosis in this state.

DIPHTHERIA

This dread disease, which many of us remember, has been nearly wiped out. Portland, with a population of 73,000, has had

one death from diphtheria since 1928. 12,908 inoculations have been given, using the toxin-antitoxin up to December, 1933, and this year using the toxoid.

SMALLPOX

Rare, yes, but each year we are laying ourselves more open to a wide and disastrous epidemic. Some years back a member of our legislature who was afflicted with that disease known as Christian Science, having two boys approaching school age, succeeded in striking the compulsory vaccination law from our statutes. As medical men we have been very lax in not demanding its re-enactment. Two years ago a census of the children in our city schools showed almost 40% unvaccinated and in the lower grades the percentage was 52. Must we have a devastating epidemic of smallpox overtake us before we become alert to the danger? I recommend that our legislative committee act at the next meeting of the legislature.

I have mentioned three diseases which it is possible with the knowledge and means at our hands to wipe out entirely from our state. This Association represents the leadership of things medical. A publicity campaign conducted by this Association, backed by the individual effort of its members, can close the doors of our tuberculosis sanatoria, banish diphtheria and smallpox. It is a task which cannot be relegated to the individual but demands the concerted action on the part of this Association.

Following the present tuberculosis survey, the next step in our program will be the detection and care of all cardiac cases. Later will come the problem of correction of speech defects. One of the big problems in our public school system today is that of the so-called repeaters, morous or misfits. The correction of defects in hearing, vision and other handicaps has solved many of these cases and revealed that many children, apparently dumb, only needed correction of physical defects to show they have active and alert minds.

I can only mention, in passing, the vast amount of work being done by the dental clinic, the seven-point health program, and the home teaching of cripples and other invalids who are unable to attend our schools.

Physicians throughout the state, especially in the larger centers, are giving unsparingly of their time and service in clinics and hospitals in the care of those who are ill. There is an open field with vast opportunities for physicians to do health work in public schools, where the prevention of illness and the build-

ing of sound minds in healthy bodies for future citizenship is the goal to be attained. I wish to take this opportunity to acknowledge and thank the many physicians who have given freely of their time in helping to render this health program a success.

Abstracts

"Analysis of 283 Treated Cases of Gonorrhea in the Male"

By P. S. PELOUZE, M. D.

Venereal Disease Information, U. S. Public Health Service, September, 1934.

The author divides this series into two groups: (1) those seen before the 5th day of the discharge, and (2) those seen after the 5th day.

Of the 100 cases seen before the 5th day, 20 had posterior infection when first seen due to alcohol or coitus, but only 12 developed posterior infection during the course of treatment. 4 developed epididymitis, 2 of which followed gross misconduct, the other two had posterior involvement when first seen.

Of the 183 cases seen after the 5th day only 12 escaped posterior infection. Other complications in this group were: Epididymitis, 37; arthritis, 16; acute prostatitis, 16; follicular abscess, 55; prostatic abscess, 3; Cowper's abscess, 3; seminal vesiculitis, 2; sinusitis, 3; paraphrenal abscess, 3.

In Group 1, seen before the 5th day, the average duration of the disease was 5.6 weeks; in Group 2 the average was 18 weeks.

The author also states "The course of the disease in those who had been given gonococcal vaccines offered no recommendation for the efficacy of vaccine treatment."

A. B. A.

"Malignant Disease of the Larynx"

MacKenty.

Archives of Oto-laryngology, Sept., 1934.

This article was read before the College of Surgeons in 1930, a little more than a year before the death of the author, and only now published. It is interesting to note that even now, four years later, the words of this ablest authority on the subject ring with conviction to the present-day reader. This article contains numerous case reports illustrative of different neoplastic conditions in the larynx. The underlying thought throughout is that, most frequently, apparently benign laryngeal conditions eventually become malignant. The author believes that they are malignant from the

start, that malignant changes are active long before they become manifest. Some biologic process may hold in restraint the frank manifestations of malignancy for a time. To his mind ante-malignancy means the initial stage of malignancy, and should be regarded as such in planning surgical management.

F. T. H.

"Effects of Ionization on the Mucosa of Frontal Sinuses of Dogs"

McMahon.

Annals of Otology, Rhinology and Laryngology, Sept., 1934.

As a result of experimental work on the frontal sinuses of dogs, the author concludes that destructive changes, with fragmentation, complete destruction of surface epithelium and edema of sub-epithelial tissues, take place following the ionization of zinc sulphate solution. Because of the recent interest in ionization treatment for Vasomotor Rhinitis, this should be given careful consideration. It is well to remember, however, that this work was done upon mucous membrane extremely sensitive and that the same results would not necessarily take place in intra-nasal membrane. This would seem substantiated by recent pathological studies of ionized mucous membrane by Alden, which shows complete restoration of ciliated epithelium.

F. T. H.

"Operation for Removal of Carcinoma of the Faucial Tonsil and Contiguous Parts"

Macpherson.

Annals of Otology, Rhinology and Laryngology, Sept., 1934.

The author describes a new operation for malignant disease of the tonsil which seems logical and fairly easy from the anatomical point of view. A preliminary ligation of the external carotid is done. The second stage consists of a central pharyngotomy, reflecting the muscles laterally in planes. Care is taken to preserve the hypoglossal,

glossopharyngeal and superior laryngeal nerves. Dissection is done by diathermy. All involved tissue is removed.

F. T. H.

"Bacteriophages in Chronic Colitis of Undetermined Causation and in Intestinal Fistulas"

By W. J. MACNEAL, M. D., FRANCES FRISBEE, A. B.,
and M. APPLEBAUM, A. B.,

Arch. of Surg., Nov., 1934.

This interesting paper deals with the therapeutic use of various bacteriophage preparations in the treatment of obscure resistant non-specific types of chronic infection of the colon and of fistulous tracts through which are passing multitudes of intermingled micro-organisms and heterogeneous remnants of food in the human feces. Its theory is that any continuing inflammatory process is caused in part by secondary invaders, or intestinal bacteria ordinarily harmless to the intact intestinal wall, but injurious to the deeper structures after the integrity of the protective epithelial covering has been disturbed; and if by some agent, a few, or only one of these microbe species may be overcome, it may be enough to tip the balance of infection in the direction of healing.

The authors treated 14 patients who had a stubborn, non-specific chronic colitis. In 7 there was definite clinical improvement, one case showed no change, and 6 cases have not been fully reported as yet. Two patients with post-operative intestinal fistulas were so studied, and in each the bacteriophage seemed to be influential in the eventual restoration to health from a downward course.

The authors conclude that use of bacteriophage preparations by mouth or injection into fistulous tracts is without any untoward effects and that while results have not been dramatic, yet they have been distinctly beneficial when other measures have seemed to be of no help, and hence worthy of trial in such baffling conditions.

D. H. D.

"The Effect of Mucin and Mucinoids on Peptic Digestion"

By H. C. BRADLEY and M. HODGES,

Journ. Lab. and Clin. Med., Nov., 1934.

These authors attempted to evaluate the behavior of gastric mucin and similar substances in terms of properties upon which therapeutic use might be originated. The effects of mucin on the peptic cleavage of raw fibrin was studied particularly because in the active peptic ulcer, the layer of exudate-fibrin laid down on the surface is believed to be the necessary factor for organization and tissue growth which constitutes healing, and

anything which will delay or prevent the digestive removal of this pellicle of fibrin should therefore be of potential value in permitting normal healing to proceed uninterrupted. It was found that mucin definitely retarded the digestion of fibrin; in the first three hours it may exceed 50% reduction of digestion, but by the end of three days the results are identical with those where mucin was not used. Vegetable mucinoids (okra, agaragar, gum ghatti, and starch) were similarly tried. Okra most nearly resembles mucin in the results obtained.

Commercial gastric mucin made by the Wilson Laboratory was used. This was a laboratory, not clinical, experiment. The authors conclude that there occurs a temporary delay in the digestive removal of fibrin covered and protected by such mucinous materials as gastric mucin and okra. This inhibition has the same effect as reducing the concentration or activity of pepsin in the digesting mixture.

D. H. D.

"Coronary Occlusion and Sudden Death"

CAPTAIN ELBERT DECOURSEY, M. C., U. S. Army

Jour. Lab. and Clin. Med., Sept., 1934

This article covers the results found in a study of 345 consecutive autopsies, of which 286 were upon bodies over one year of age, representing 208 negroes and 78 Caucasians. Excepting the accidental and traumatic deaths there were 25 sudden deaths from all causes. Thirteen of these were from coronary occlusion. There were 11 cases of coronary sclerosis without thrombosis, 4 cases with thrombosis, 2 cases of syphilitic atresia of the coronary orifice and 1 of coronary embolism. The following working rule is suggested: Unless there are signs definitely indicating other disease in a white male over forty years of age who dies within three hours after the onset of either respiratory, cardiac, or gastric symptoms, the cause of death is coronary occlusion.

D. H. D.

For Sale

Cheap for cash. Two diathermy machines, one galvanic battery, one colonic irrigating apparatus, drugs, surgical instruments, and medical library. All in good condition.

Mrs. W. H. Harris
68 Grove St.,
Augusta, Maine.

Necrology



***Dr. True E. Makepeace,
Farmington, 1891-1934***

On November 6th, the hospital suffered an irreparable loss when Dr. True E. Makepeace answered his last call, at the age of forty-three. From the founding of the hospital until his death, Dr. Makepeace served as Secretary of the Medical Staff, Roentgenologist, and Director of the Laboratory, and was for three months each year physician on service. The hospital was from the first much on his mind and heart. He realized its immense possibilities for service to the people of this region and to the maintenance of high standards in the medical profession.

In spite of the fact that Dr. Makepeace had been in practice here but fifteen years, his work was well known over the greater part of the State, and at any meeting where he spoke he was given most earnest attention. He has honored and been honored by the American Legion and Masonic bodies, but his greatest concern during the past years has been the welfare of his patients and of the hospital. As he was at the hospital every day and often many times a day except during infrequent absences from town, it can

readily be seen how much his wonderful personality as well as his kindly, competent care for others will be missed. — *Commonwealth Fund Publication.*

Seldon Burden Overlock, Steuben, Me., and Pomfret, Conn., 1860-1934

Born in Washington, Maine, November 13, 1860, the son of Nathaniel R. and Mary Hannan, Seldon Burden Overlock was educated in the common schools until he was sixteen, and was then sent to Kent's Hill. In due season he was graduated from Colby. He next studied medicine successfully at the Bellview Medical School in New York City, was interne at the hospital there and finally practiced medicine at Steuben for five years. In 1894, he opened an office in Pomfret, where he practiced chiefly as a surgeon for the rest of his life. He was devoted to the surgery of the Day-Kimball Hospital and was its chief surgeon for many a year. He was president of the County Medical Society, the Connecticut State Medical Society, the Maine Medical Association, and to crown his career, he was, in 1914, elected a Fellow of the American College of Surgeons. One of the highest offices which he obtained from the State of Connecticut and upon which he served with honor and with great pride for six years was on the Board of Pardons.

In 1892, he married Miss Cora C. Smith of Steuben. Dr. Overlock was a man of great industry and determination, a dominant, vital, authoritative personage. He leaves a legacy of great medical practice courageously and nobly carried out. It might have been said that during the last few years he retired somewhat from active practice, but was always interested in those who needed medical attention and surgical help. With his monumental sturdy frame and his authoritative features he was a man who will long be remembered.

J. A. S.



***David White Sheldon,
Stetson and Carmel, 1871-1934***

It is with much regret that we announce the sudden death of Dr. Sheldon at his home in Carmel, Friday, October 19, 1934, after a very brief illness. He was born in Dresden, October 29, 1872, the son of Joseph W. and Sarah White Sheldon. He had a common school education in Dresden and a full course of four years at Bridge Academy. He studied with a local doctor in the rudiments of medicine and was graduated M. D. from the Vermont Medical School in 1898.

He practiced in Dresden for two or three years, then in Stetson from 1900 to 1929 and finally at Carmel until the time of his death. He saw patients and treated them only three days before he passed away.

He is survived by a wife who was Alberta Berry of Stetson, three married daughters and a young son. His success in practice was very remarkable. He was a cheerful and genial man, was a devoted member of the I. O. O. F., and very much interested in the Boy Scouts of America. He was quiet and unassuming, only joined the Maine Medical Association a few years, but he leaves many friends and acquaintances. He was a medical man entirely devoted to his patients.

J. A. S.



***Dr. Albert I. York,
Wilton, 1870-1934***

Dr. Albert I. York, prominent physician and surgeon of Wilton for thirty-six years, died after two days' illness on October 16th. Up to the 14th, when he was taken with an acute heart condition, he was apparently in his usual good health.

Dr. York was an outstanding type of the "family physician," and in many homes in and around Wilton there are at least two generations that he had welcomed on their arrival. These homes and many others will miss his genial, friendly attention.

He was an ardent supporter of the hospital, and after it was opened he transferred much of that work formerly done in his office to the hospital. The community has lost a valued member and the hospital a valued friend and advisor. — *Commonwealth Fund Publication.*

We regret to announce the deaths of Dr. J. J. Mcvety of Old Town, a former member of our Association, and Dr. Clinton P. Hubbard of South Paris at the advanced age of eighty-five.

County News and Notes

Franklin

The annual meeting of the Franklin County Medical Society was held in Farmington on September 1, 1934.

Following a dinner served in the American Legion Building, Dr. B. L. Arms discussed the rabies situation.

Dr. E. W. Gehring, President, and Dr. J. L. Johnson, President-elect, of the Maine Medical Association, were guests, and spoke on matters of interest to the Profession.

Dr. L. A. Shepherd, Chief Surgeon and Director of the American Hospital at Istanbul, Turkey, gave an extremely interesting account of his work.

We have recently suffered the loss, by death, of two of our most faithful members—Dr. Albert I. York of Wilton and Dr. True E. Makepeace of Farmington.

The following officers were elected for the coming year: President, Dr. B. L. Arms, Farmington; Vice-President, Dr. V. O. White, East Dixfield; Secretary and Treasurer, Dr. G. L. Pratt, Farmington; Delegate to Maine Medical Association, Dr. T. E. Makepeace, Farmington; Alternate to Maine Medical Association, Dr. C. W. Bell, Strong; Member of Legislative Committee, Dr. G. L. Pratt, Farmington; Censor for three years, Dr. A. I. York, Wilton.

Twenty-five members and guests were present at this meeting.

G. L. PRATT, *Secretary*.

Somerset

The Somerset County Medical Society held its Annual "Hunters" meeting at Bingham, Oct. 26. A special invitation was sent to the Franklin County Medical Association as well as to other interested doctors in Portland, Brunswick, Richmond, Augusta and Waterville. All these, with their lady guests to the number of 70, enjoyed a special dinner of partridge and venison, arranged by Dr. and Mrs. Ball of Bingham. All except 3 members of the Somerset County Association were present. After dinner the ladies were entertained by Mrs. Williams, the widow of the late Dr. J. Leon Williams, at her beautiful and interesting summer home, Concord Haven. President Milliken called the meeting to order and introduced the guest speaker, Dr. H. S. Emery of Portland, who gave a talk on Nephritis. This was followed by a talk by Dr. Makepeace of Farmington and Dr. Gilbert of Madison. Dr. Moulton of Hartland gave a paper on Emphysema with X-ray pictures and a case for examination. Dr. E. W. Gehring, President of the Maine Medical Association, gave a painstaking talk on collections, insurance and other timely topics. Taken as a whole this was one of the best meetings ever held by the Association. At the close of the meeting all joined the ladies at Concord Haven where they were pleasantly entertained.

C. A. MOULTON, *Secretary*.

Kennebec

The meeting of the Kennebec County Medical Association was held at the Gardiner General Hospital in Gardiner, Thursday, November 15, 1934, afternoon and evening.

A Clinical Session was held at 4.30 P. M., which

was presided over by Dr. George W. Alexander, President.

After dinner a business meeting was held.

Three doctors were admitted to membership: Drs. Merriwell Shelton, Augusta, Ivan E. McLaughlin, Gardiner, and Greenlie H. Lambert, Winthrop. Resolutions were read on the death of Dr. W. H. Harris, who died June 13, 1934, by Dr. George R. Campbell of Augusta.

Resolutions were read on the death of Dr. Ralph W. Bicknell, who died June 7, 1934, by Dr. Forrest H. Badger of Winthrop.

Resolutions were read on the death of Dr. Wallace N. Price, who died June 16, 1934, by Dr. Chalmers G. Farrell of Gardiner.

It was voted that a copy of these Resolutions be spread on our Records and copies sent to the families of the deceased.

1. Dr. George Campbell reported that the Committee composed of Dr. Campbell of Augusta, Dr. Piper of Waterville, and Dr. Libby of Gardiner recommended and suggested that members of the Kennebec County Medical Association submit all their bills for collection to the Medical Auditing Counsel, Portland, of which George S. Burkitt is managing director.

2. They did not recommend that all members of the Association subscribe to the Medical Credit Report Book.

Dr. Edwin W. Gehring of Portland, President of the Maine Medical Association, spoke briefly relative to malpractice insurance and the collection of dues.

The following papers were read:—

"Gangrene of the Bladder," by Dr. A. B. Allen, Waterville. Discussion opened by Dr. A. H. McQuillan, Waterville.

"Gastric Surgery," by Dr. William R. Morrison, Boston. Discussion opened by Dr. Louis F. Fallon, Augusta.

Dr. Morrison's paper was followed by moving pictures of various operations which he had done.

These papers were both very interesting and ably presented, and brought out a great deal of discussion.

Thirty-six members and guests were present.

F. R. CARTER, *Secretary*.

Portland Medical Club

A regular meeting of the Portland Medical Club was held at the Columbia Hotel on Tuesday evening, November sixth.

Resolutions on the death of Dr. W. Bean Moulton were adopted by the Club and spread upon the records.

Dr. W. L. Cousins was made an honorary member.

The paper of the evening was by Dr. Harold V. Bickmore, who chose for his subject "Gall-bladder Disease."

ALICE WHITTIER, M. D., *Secretary*.

News and Notes

1935 Annual Session

The eighty-third annual meeting of the Maine Medical Association will be held at the Marshall House, York Harbor, Maine, June 23rd, 24th, and 25th, 1935.

Dr. I. Francis Gregory of Bangor is giving up his practice in that city this month to take over the duties of resident surgeon at the New Jersey Orthopedic Hospital.

American College of Surgeons

The JOURNAL office library is in receipt of an abstract of the presidential address delivered by Dr. Robert B. Greenough of Boston before the Clinical Congress of the American College of Surgeons on the evening of October 15, 1934, entitled "Efficient Surgical Service in the Whole Community." This address constitutes an elaboration of the report of the Medical Service Board which was adopted and published by the Board of Regents of the American College of Surgeons on June 10, 1934. The JOURNAL will be pleased to lend this paper to any interested surgeon.

Lilly Research Laboratories Formally Opened

More than a thousand investigators and research workers were present at the formal opening of the new Lilly Research Laboratories at Indianapolis on October 11th. The gathering of distinguished visitors, representing many noted bodies and famous institutions in this and foreign countries as well, assembled in a mammoth tent erected for the occasion adjacent to the Lilly Laboratories. At the exercises several noteworthy papers were delivered by Mr. J. K. Lilly, chairman of the board of directors, Dr. Irving Langmuir, director of research for the General Electric Company, Sir Frederick Banting, and Sir Henry Dale, director of the National Institute for Medical Research, London. Tribute was paid to Eli Lilly and Company for their high rank among industrial organizations which have supported scientific research for its own sake and because they have known how to value the spirit which is engendered when scientific workers are given a wide freedom.

The afternoon program was followed by an inspection of the new laboratories, and in the evening a banquet was tendered the out-of-town guests.

Triological Society Meeting

The Eastern Section of the American Laryngological, Rhinological and Otolological Society will hold a meeting in Portland, Maine, January 4, 1935. The Maine Medical Association welcomes the members of this Society and offers all the facilities of our Secretary's office.

Panel System in England

"Doctors who participate in the panel system in England are paid \$2.25 a year for each insured person on their list, and for that sum make as many sick calls as are required during the year. The average number of insured persons on a physician's list is about 1,000."—N. Y. State J. M.

To the County Secretaries

Your State Secretary is requesting you to send out the bills for 1935 State and County dues promptly, January 1st. The State dues for the coming year will be \$8.00. Members who have not paid their dues by April 1, 1935, will be dropped

for non-payment, according to our Constitution and By-Laws, Chap. VIII, Sec. 1. The Council has instructed your State Secretary to adhere strictly to the above ruling for the year 1935. Start the New Year right! In fairness to your County members, your bills should be mailed out the first day of 1935.

National Tuberculosis Association

Although we have few Sanatoria in Maine, we gladly print the appended note, as it might prove of value in other ways.

For the first time it is now possible for tuberculosis sanatoria to keep uniform and complete records of all material facts about their patients, available at all times for instant consultation. This important improvement in health bookkeeping is a result of two years' work done by a committee of the American Sanatorium Association, assisted in a secretarial capacity by members of the staff of the National Tuberculosis Association. The 23 new forms which have been prepared are obtainable from the Livingston Press, Livingston, N. Y.

Formerly it was often necessary, when information of a consecutive or cumulative nature was needed, to expend considerable time and effort to collect and arrange pertinent facts from records made at different times, and reposing in various forms which were kept primarily for other reasons than the one which might now be in mind. The new system has the added advantage in rendering available, as a matter of routine, facts which serve to satisfy statistical needs from a national viewpoint.

Some of the forms are merely improvements over existing ones; others make an original contribution. Among the latter are these pertaining respectively to (a) Nose, throat, ear, eye, and teeth; (b) Pneumothorax; (c) Operations; (d) Tuberculous empyema; (e) Statistical summary on discharge.

Forms are numbered and designated, as follows:

1. History—4 pages
- 1a. History
2. Examination
3. Nose, Throat, Ear and Eye—Teeth
4. Physician's Orders
5. Nurse's Record
6. Weight Chart
7. Temperature, Pulse and Respiration
8. Laboratory Examinations (Sputum, etc.)
9. Laboratory Examinations (Blood, etc.)
10. X-ray
11. Re-examination
12. Pneumothorax
13. Exercise Chart
14. Heliotherapy
15. Prescription for Physiotherapy
16. Consultation
17. Operations
18. Tuberculous Empyema
19. Permission for Autopsy
20. Admissions—Discharges
21. Statistical Summary on Discharge
22. Blank Form (heading only)
23. File Folder

The Committee of the American Sanatorium Association which was appointed to prepare the forms comprised: Dr. Everett Morris of Auberry, California, chairman; Dr. H. A. Pattison, Dr. Ernest B. Emerson, Dr. F. Maurice McPhedran, Dr. Harry J. Corper, Dr. C. C. Browning and Dr. Walter J. Marcle.

The secretarial work was done under the supervision of Jessamine S. Whitney, statistician of the National Tuberculosis Association.



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